

State of New Jersey Department of Environmental Protection

N S. CORZINE Governor

LISA P. JACKSON

Commissioner

Air Quality Permitting Program P.O. Box 027 Trenton, NJ 08625-0027 (609)-292-6716

Prevention of Significant Deterioration Permit

Permit Activity ID Number: BOP060001

Facility ID Number: 78901

Mailing Address	Plant Location
Scott Salisbury Manchester Renewable Power Corporation 29261 Wall Street Wixom, MI 48393	MANCHESTER RENEWABLE POWER CORP LES Rt 70 Lakehurst Boro Ocean County, New Jersey

Effective date: 30 days from August 4, 2006 (see below)

Dear Mr. Salisbury:

This Prevention of Significant Deterioration Permit is issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2), and federal Prevention of Significant Deterioration regulations at 40 CFR 52.21. This permit shall constitute the authorization to construct the equipment/control devices, and/or stacks specified in this permit.

You are authorized to commence construction on this project on the effective date of this permit. The effective date of this permit is 30 calendar days after the Department gives the notice of permit issuance, except when there is a request for administrative review pursuant to 40 CFR 124.19, in which case the effective date is the date administrative review is denied, or the administrative review is completed and the permit is approved

The PSD regulations, specifically 40 CFR 52.21(q), provide for administrative review of a final PSD permit decision within 30 days from the date of issuance of the permit. The opportunity for administrative review of the final PSD permit decision will commence with notice of its issuance to the public. The procedural requirements for administrative review are defined in the Consolidated Permits Regulations codified at 40 CFR 124 (45 FR 33405). Requests for administrative review of a final PSD permit decision should be made to:

United States Environmental Protection Agency Environmental Appeals Board (MC-1103B) Ariel Rios Building 1200 Pennsylvania Avenue, N.W Washington, D.C. 20460 (Standard mail requests)

United States Environmental Protection Agency Environmental Appeals Board Westory Building 607 14th Street, NW, Suite 500 Washington, D.C. 20005 (Hand delivery including express mail services)

Administrative review is available only to those persons who commented during the public comment period and is restricted to issues raised during the comment period with the exception that any person, including those who failed to file comments on the preliminary permit determination, may petition for administrative review of the changes from the draft PSD permit to the final PSD permit. Upon issuance by the Department of the final permit decision, or in the case of an administrative review upon completion of the administrative review process, the final PSD permit decision will be a final United States Environmental Protection Agency action and will be published in the Federal Register. This final action may be challenged only by filing a petition for review in the United States Court of Appeals for the appropriate circuit within 60 days of the date of the Federal Register notice. The final PSD permit shall not be subject to later judicial review in enforcement proceedings. Opportunity for judicial review is only provided at the completion of the administrative appeals process and is only provided to those persons who were parties in an administrative appeal.

If construction is not commenced within 18 months of the effective date of this approval, this permit shall become invalid. Commence, as applied to construction of this source, is defined at 40 CFR 52.12(b)(9).

This Prevention of Significant Deterioration permit alone does not authorize the facility to operate until its Operating Permit has been issued. Upon completion of 45 day United States Environmental Protection Agency review, a decision on the Operating Permit will be made. The facility will be notified about the decision under a separate cover.

If you have any questions regarding this document, please contact Aliya M. Khan of my staff at (609)-292-2169.

Approved by:

Lou Mikolajczyk, Chief

Bureau of Preconstruction Permits

C: file

EPA (Region 2)

Table of Contents

Facility Name: MANCHESTER RENEWABLE POWER CORP LES

Facility ID No.: 78901 Activity ID No.: BOP060001

Section A

AUTHORIZED SOURCE OPERATIONS

Section B

ACRONYMS

Section C

FACILITY PROFILE (Administrative Information)

Section D

FACILITY SPECIFIC REQUIREMENTS

Section E

INVENTORIES

Section A

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Facility ID No.: 78901
Activity ID No.: BOP060001

AUTHORIZED SOURCE OPERATIONS

Description of Source Activity

Source Operation Type: Manchester Renewable Power Corporation is an existing major landfill gas (LFG)

to energy generation facility with a capacity of 4.5 megawatt (MW). It is adding six new 2,233 bhp lean burn reciprocating internal combustion engines with a total maximum power generation rating of 9.6 MW. The maximum power generation capacity of the plant will be 14.1 MW after the installation and

operation of the new engines.

Source Operation Description: The new engines will have a maximum power rating of 1.6 MW each when running

on the landfill gas from Ocean County Landfill as fuel.

Source Operation Details: The sources authorized by this permit shall be operated within the parameters

specified in the detailed information attached to this section. Operation of the authorized sources within these parameters is required <u>in addition</u> to compliance with the conditions specified in Section E – Facility Specific Requirements of this

permit.

Section B

Facility Name: MANCHESTER RENEWABLE POWER CORP LES

Facility ID No.: 78901 Activity ID No.: BOP060001

ACRONYMS

BPP Bureau of Preconstruction Permits

BOP Bureau of Operating Permits

BTS Bureau of Technical Services

CEM Continuous Emissions Monitor

CFR Code of Federal Regulations

COM Continuous Opacity Monitor

EPA United States Environmental Protection Agency

HAP Hazardous Air Pollutant

N.J.A.C. New Jersey Administrative Code

NJDEP New Jersey Department of Environmental Protection

PST Performance Specification Test

REO Regional Enforcement Office - NJDEP

TSP Total Suspended Particulate Matter

VOC Volatile Organic Compound

Section C

Facility Name: MANCHESTER RENEWABLE POWER CORP LES

Facility ID No.: 78901 Activity ID No.: BOP060001

FACILITY PROFILE

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Profile (General)

Facility Name (AIMS): MANCHESTER RENEWABLE POWER CO	Facility ID (AIMS): 78901
---	---------------------------

Street RT 70

Address: LAKEHURST, NJ 08733

Mailing POBOX 320

Address: LAKEHURST, NJ 08733

County: Ocean

Location Description:

State Plane Coordinates:

X-Coordinate:
Y-Coordinate:
Units:

Datum:
Source Org.:
Source Type:

Industry:		 	
Primary SIC:			
Secondary SIC:			
NAICS:	*		

Date: 8/4/2006

MANCHESTER RENEWABLE POWER CORP LES (78901) BOP060001

New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: BOP - Operating Permits				
Organization: Manchester Renewable Power Corpora	ation/LES	Org. Type: Corporation		
Name: Mike Laframboise		NJ EIN:		
Title: Project Commissioning/Operations Manager				
Phone: (732) 657-6285 x	Mailing	PO Box 320		
Fax: () - x	Address:			
Other: () - x		Lakehurst, NJ 08733		
Type:				
Email:				
•				
Contact Type: Consultant				
Organization: Derenzo and Associates		Org. Type: Corporation		
Name: David Derenzo		NJ EIN:		
Title: President	*			
Phone: (734) 464-3880 x	Mailing	39201 Schoolcraft, Suite B-10		
Fax: (734) 464-4368 x	Address:	Livonia, MI 48150		
Other: () - x		• • • • • • • • •		
Type:	*	: · · · · · · · · · · · · · · · · · · ·		
Email:				
Contact Type: On-Site Manager				
Organization: Manchester Renewable Power Corpor	ration/LES	Org. Type: Corporation		
Name: Mike Laframboise		NJ EIN:		
Title: Project Commissioning/Operations Manager				
Phone: (732) 657-6285 x	Mailing	PO Box 320		
	Address:	Route 70		
Fax: () - x		Lakehurst, NJ 08733		
Other: () - x				
Туре:				
Email:				

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Operator			
Organization: Manchester Renewable Power Corpor Name: Tony Aiello Title: Plant Operator	ation/LES	Org. Type: Corporation NJ EIN:	
			*
Phone: (732) 657-6285 x	Mailing Address:	P.O. Box 320	*
Fax: () - x	Address:	Lakehurst, NJ 08733	
Other: $()$ - x	11.		
Type:	• 11		
Email:			
Contact Type: Owner (Current Primary)			***************************************
Organization: Manchester Renewable Power Corpora	ation/LES	Org. Type: Corporation	. * .
Name: Scott Salisbury		NJ EIN:	
Title: President		No Ell.	
Phone: (248) 380-3920 x	Mailing	29261 Wall Street	
Fax: () - x	Address:	Wixom, MI 48393	100
Other: () - x	1.		*
Type:			
Email:			
Contact Types Description			
Contact Type: Responsible Official			
Organization: Manchester Renewable Power Corporation	tion/LES	Org. Type: Corporation	
Name: Scott Salisbury		NJ EIN:	
Title: President		* #	
Phone: (248) 380-3920 x	Mailing	29261 Wall Street	
Fax: () - x	Address:	Wixom, MI 48393	
Other: () - x			
Туре:			
Email:		¥.	

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Profile (General)

Contact Type: Responsible Party		*
Organization: Manchester Renewable Power Corp	oration/LES	Org. Type: Corporation
Name: Scott Salisbury		NJ EIN:
Title: President	* *	
Phone: (248) 380-3920 x	Mailing	29261 Wall Street
Fax: () - x	Address:	Wixom, MI 48393
Other: () - x	- 45.	
Type:		
Email:		***

Section D

Facility Name: MANCHESTER RENEWABLE POWER CORP LES Facility ID No.: 78901

Activity ID No.: BOP060001

FACILITY SPECIFIC REQUIREMENTS

Compliance Plan Table of Contents

ubject Item and Name				* .	Page Number
FC					1 - 4
Group (GR):		*			
GR1					5-6
		*			, A
Emission Unit (U):					
U1, OS1	*				7 - 11
U2, OS1 U3, OS1	*	,			12
U4, OS1			o •	v .	13 14
U5, OS1	* 1				15
U6, OS1 U7 Six Ocean Energy	Corp. CAT	3520 Lean Bu	ırn Recipro	cating Engines	16
OS Summary	у			Jenne Dignes	17
OS1					. 20

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Subject Item:

FÇ

Ref.#	. Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	General Provisions: Defines numerous terms used in N.J.A.C. 7:27. Specifies procedures for making confidentiality claims, certifying applications, reports, and other documents to the Department, and requesting adjudicatory hearings and stays of the effective date of departmental decisions. Also, provides provisions regarding applicability, severability, and liberal construction of N.J.A.C. 7:27. [N.J.A.C. 7:27-1]	None.	None.	None.
2	Control and Prohibition of Open Burning: Prohibits any person from open burning of rubbish, garbage, trade waste, buildings, structures, leaves, other plant life and salvage. Open burning of infested plant life or dangerous material may only be performed with a permit from the Department. [N.J.A.C. 7:27-2]	None.	None.	Obtain an approved permit: Prior to occurrence of event (prior to open burning). [N.J.A.C. 7:27-2]
3	Prohibition of Air Pollution: Notwithstanding compliance with other subchapters of N.J.A.C. 7:27, no person shall suffer, allow, or permit to be emitted into the outdoor atmosphere substances in quantities that result in air pollution as defined at N.J.A.C. 7:27-5.1. Applicable to all facilities located in New Jersey. [N.J.A.C. 7:27-5]	None.	None.	None.
4	Prevention and Control of Air Pollution Control Emergencies: Requires that written Standby Plans, consistent with good industrial practice and safe operating procedures, be prepared for reducing the emission of air contaminants during periods of an air pollution alert, warning, or emergency. Any person responsible for the operation of a source of air contamination not set forth in Table 1 of N.J.A.C. 7:27-12 is not required to prepare such a plan unless requested by the Department in writing. [N.J.A.C. 7:27-12]	None.	None.	Comply with the requirement: Upon occurrence of event. Upon proclamation by the Governor of an air pollution alert, warning, or emergency, the permittee shall put the Standby Plan into effect. In addition, the permittee shall ensure that all of the applicable emission reduction objectives of N.J.A.C. 7:27-12.4, Table I, II, and III are complied with whenever there is an air pollution alert, warning, or emergency. [N.J.A.C. 7:27-12]

BOP060001

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Emission Offsets Rules. [N.J.A.C. 7:27-18]	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [N.J.A.C. 7:27-18].	Comply with the requirement: Upon occurrence of event. Submit an administratively complete application when applying for a minor modification pursuant to N.J.A.C. 7:27-22.23 or a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]
6	Emissions Statements: Submit an annual emission statement (if required) electronically to the NJDEP by May 15 of each year (or by mutually agreed upon date, but no later than June 15 of each year). [N.J.A.C. 7:27-21]	Other: The emission statement will be based on monitoring, recording and recordkeeping of actual emissions, capture and control efficiencies, process rate and operating data for source operations with the potential to emit certain air contaminants. [N.J.A.C. 7:27-21].	Other: The emission statement and all supporting records shall be maintained on the operating premises for a period of five (5) years from the due date of each emission statement. [N.J.A.C. 7:27-21].	Submit an Annual Emission Statement: Annually (if required) electronically by May 15 or by any mutually agreed upon date, but not later than June 15 of each year. [N.J.A.C. 7:27-21]
7	Compliance Certification: Submit annual compliance certification for each applicable requirement, pursuant to N.J.A.C. 7:27-22.19(f), within 60 days after the end of each calendar year during which this permit was in effect. [N.J.A.C. 7:27-22]	None.	None.	Submit an Annual Compliance Certification: Annually to the Department and EPA on forms provided by the Department within 60 days after the end of each calendar year during which this permit was in effect. The annual compliance certification reporting period will cover the calendar year ending December 31. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
8	Prevention of Air Pollution from Architectural Coatings and Consumer Products. [N.J.A.C. 7:27-23]	None.	None.	None.
9	For equipment subject to NOx Budget Program, comply with N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31]	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Other: See N.J.A.C. 7:27-31. [N.J.A.C. 7:27-31].	Comply with the requirement: Upon occurrence of event. [N.J.A.C. 7:27-31]
10	Any operation of equipment which may cause off-property effects, including odors, shall be reported to the Department to the extent required by the Air Pollution Control Act, N.J.S.A. 26:2C-19(e). [N.J.S.A. 26:2C-19(e)]	Other: Observation of plant operations. [N.J.S.A. 26:2C-19(e)].	Other: Maintain a copy of all information submitted to the Department. [N.J.S.A. 26:2C-19(e)].	Notify by phone: Upon occurrence of event. A person who causes a release of air contaminants in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints shall immediately notify the Department. Such notification shall be made by calling the Environmental Action Hotline at (877) 927-6337. [N.J.S.A. 26:2C-19(e)]

BOP060001

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement	
11	Prevention of Significant Deterioration (PSD). [40 CFR 52.21] Other: When applying for minor/sig modification, demonstrate complian this applicable requirement which m for specific monitoring and/or recordkeeping activities. [40 CFR 52]		Other: When applying for minor/significant modification, demonstrate compliance with this applicable requirement which may call for specific monitoring and/or recordkeeping activities. [40 CFR 52.21].	Comply with the requirement: Upon occurrence of event. If subject to PSD, the permittee shall submit an administratively complete application when applying for a significant modification pursuant to N.J.A.C. 7:27-22.24. [N.J.A.C. 7:27-22]	
12	National Emission Standards for Hazardous Air Pollutants (NESHAPS) for Asbestos. [40 CFR 61]	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Other: Comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 61.145 and 61.150 when conducting any renovation or demolition activities at the facility. [40 CFR 61]	
13	Protection of Stratospheric Ozone: 1) If the permittee manufactures, transforms, destroys, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified at 40 CFR 82, Subpart A; 2) If the permittee performs a service on motor "fleet" vehicles when this service involves an ozone depleting substance refrigerant (or regulated substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified at 40 CFR 82, Subpart B. 3) The permittee shall comply with the standards for labeling of products containing or manufactured with ozone depleting substances pursuant to 40 CFR 82, Subpart E. 4). The permittee shall comply with the standards for recycling and emission reductions of Class I and Class II refrigerants or a regulated substitute substance during the service, maintenance, repair, and disposal of appliances pursuant to 40 CFR 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B. 5) The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program (SNAP) promulgated pursuant to 40 CFR 82, Subpart G. [40 CFR 82]	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Other: Comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82].	Comply with the requirement: Upon occurrence of event. The permittee shall comply with 40 CFR 82 Subparts A, B, E, F, and G. [40 CFR 82]	

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
14	Deviation Report: In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d)3, the permittee shall submit to the Department, on forms provided by the Department, a certified six-month deviation report relating to testing and monitoring required by the operating permit, not including information for stack emissions testing or continuous emissions monitoring which have other reporting schedules specified in the permit (normally, stack test report is submitted within 45 days of test completion and continuous monitor reporting is done quarterly). Pursuant to N.J.A.C. 7:27-22.19(e), the six-month report must address other specified monitoring, including continuous and periodic monitoring requirements found in column 2 and 3, entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, of the Facility Specific Requirements section of this permit. These six-month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions or preventive measures taken. If no deviations occurred, the report should say so. Any "None" listed in the Submittal/Action Requirement in the Operating Permit is not intended to override the six-month deviation report. [N.J.A.C. 7.27-22.19(d)3, N.J.A.C. 7.27-22.19(e), and [N.J.A.C. 7:27-22.19(c)]	None.	Other: The permittee shall maintain deviation reports for a period of five years from the date each report is submitted to the Department. [N.J.A.C. 7:27-22.19(a)].	Submit a report: As per the approved schedule. The six-month reports for other specified testing or monitoring required by the operating permit performed from January 1 through June 30 shall be submitted by July 30 of the same calendar year, and from July 1 through December 31 shall be submitted by January 30 of the following calendar year. The report shall be submitted to the Regional Enforcement Office and shall be certified pursuant to N.J.A.C. 7:27-1.39 by the responsible official. Forms provided by the Department can be found on the Department's web site at the following link: http://www.nj.gov/dep/enforcement/compliancecertsair.htm [N.J.A.C. 7:27-22]
15	No person shall combust used oil except as authorized pursuant to N.J.A.C. 7:27-20. [N.J.A.C. 7:27-20.2]	None.	None.	Comply with the requirement: Prior to occurrence of event (prior to burning used oil) either register with the Department pursuant to N.J.A.C. 7:27-20.3 or obtain a permit issued by the Department pursuant to N.J.A.C. 7:27-8 or 7:27-22, whichever is applicable. [N.J.A.C. 7:27-20.2(d)]

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Subject Item:

GR1

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Annual emission rate from preconstruction permit. SO2 <= 4.47 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually, a report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]
2	Annual emission rate from preconstruction permit. VOC (Total) <= 24.7 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually, a report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]
3	Annual emission rate from preconstruction permit. NOx (Total) <= 65.96 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually, a report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]
4	Annual emission rate from preconstruction permit. Particulate Emissions <= 5.78 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually. A report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
5	Annual emission rate from preconstruction permit. PM-10 (Total) <= 5.78 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually. A report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]
6	Annual emission rate from preconstruction permit. CO <= 151.5 tons/yr. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually. A report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]
7	Annual fuel use limit is 1130 MM cubic feet/year. The fuel usage will be measured at the common landfill header that supplies fuel to the six engines. [N.J.A.C. 7:27-22.16(e)]	Other: Fuel Flow/Firing Rate Instrument. Continuously.[N.J.A.C. 7:27-22.16(e)].	Other: Data Acquisition System (DAS)/Electronic Data Storage. Continuously.[N.J.A.C. 7:27-22.16(e)].	Submit a report: Annually. A report shall be submitted to the Chief, Central Regional Office by April 15 of each year. The annual report shall include a summary of calendar year emissions of pollutants, which shall be determined using annual fuel consumption data and emission factors. The annual amount of each fuel used in the calendar year shall also be reported. [N.J.A.C. 7:27-22.16(e)]

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Emission Unit:

U1 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Normal firing Landfilll Gas

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
1	Smoke emissions from stationary internal combustion engines no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. Opacity <= 20 %. [N.J.A.C. 7:27-3.5]	None.	None.	None.
2	Particulate emission limit from the combustion of fuel based on rated heat input of source. Particulate Emissions <= 5.21 lb/hr. [N.J.A.C. 7:27- 4.2(a)]	None.	None.	None.
3	Maximum allowable limit for SO2 emissions at any instant. SO2 <= 16 lb/hr. [N.J.A.C. 7:27- 7.2(b)2]	None.	None.	None.
4	Maximum allowable limit for SO2 emissions in any 60 minute period. SO2 <= 8 lb/hr. [N.J.A.C. 7:27-7.2(r)]	None.	None.	None.
5	Do not exceed 500 ppmvd CO at 15% Oxygen. CO <= 500 ppmdv @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	None.	None.	None.
6	Adjust the combustion process each calendar year. Record NOx and CO concentration after each adjustment and the O2 concentration at which NOx and CO were measured. [N.J.A.C. 7:27-16.10(e)]	Other: Periodic Emission Monitoring (Portable Instrument). Annually.[N.J.A.C. 7:27-16.10(e)].	Other: Manual Logging of Parameter (Permanently Bound). Annually.[N.J.A.C. 7:27-16.10(e)].	None.
7	Restriction of NOx emission per hp-hr for lean burn I.C. engine with an output of more than 500 hp and fueled by gaseous fuel. NOx (Total) <= 2.5 grams/brake horse power hour. [N.J.A.C. 7:27-19.8(b)]	None.	None.	None.
8	Maximum Gross Heat Input <= 8.6 MMBTU/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Maximum emission limit from preconstruction permit. CO <= 0.67 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
10	Maximum emission limit from preconstruction permit. NOx (Total) <= 0.3 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
11	Maximum emission limit from preconstruction permit. SO2 <= 0.02 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
12	Maximum emission limit from preconstruction permit. VOC (Total) <= 0.11 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
13	Maximum emission limit from preconstruction permit. TSP <= 0.03 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
14	Maximum emission limit from preconstruction permit. PM-10 (Total) <= 0.03 lb/MMBTU. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Maximum emission rate from preconstruction permit. CO <= 2.3 grams/brake horse power hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Maximum emission rate from preconstruction permit. VOC (Total) <= 0.375 grams/brake horse power hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Maximum emission rate from preconstruction permit. NOx (Total) <= 1 grams/brake horse power hour. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
18	Requirement to periodically monitor and record oxygen content of exhaust gas. [N.J.A.C. 7:27-22.16(e)]	Other: Periodic Emission Monitoring (Portable Instrument). Monthly.[N.J.A.C. 7:27-22.16(e)].	Other: Manual Logging of Parameter (Permanently Bound). Monthly.[N.J.A.C. 7:27-22.16(e)].	None.
19	Maximum emission limit from preconstruction permit. NOx (Total) <= 105 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	Other: Periodic Emission Monitoring (Portable Instrument). Monthly.[N.J.A.C. 7:27-22.16(e)].	Other: Manual Logging of Parameter (Permanently Bound). Monthly.[N.J.A.C. 7:27-22.16(e)].	None.
20	Maximum emission limit from preconstruction permit. CO <= 258 ppmdv @ 15% O2. [N.J.A.C. 7:27-22.16(e)]	Other: Periodic Emission Monitoring (Portable Instrument). Monthly.[N.J.A.C. 7:27-22.16(e)].	Other: Manual Logging of Parameter (Permanently Bound). Monthly.[N.J.A.C. 7:27-22.16(e)].	None.
21	Maximum emission rate from preconstruction permit. VOC (Total) <= 0.94 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
22	Maximum emission rate from preconstruction permit. NOx (Total) <= 2.51 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
23	Maximum emission rate from preconstruction permit. SO2 <= 0.17 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
24	Maximum emission rate from preconstruction permit. CO <= 5.77 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
25	Maximum emission rate from preconstruction permit. TSP <= 0.22 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
26	Maximum emission rate from preconstruction permit. PM-10 (Total) <= 0.22 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
27	Maximum emission rate from preconstruction permit. Acrylonitrile <= 0.012 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
28	Maximum emission rate from preconstruction permit. Trichloroethane (1,1,2) <= 0.0004 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
	Maximum emission rate from preconstruction permit. Tetrachloroethane (1,1,2,2-) <= 0.001 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
30	Maximum emission rate from preconstruction permit. Carbon disulfide <= 0.0113 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
31	Maximum emission rate from preconstruction permit. Benzene <= 0.0068 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
32	Maximum emission rate from preconstruction permit. Chloroform <= 0.001 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
33	Maximum emission rate from preconstruction permit. Carbon tetrachloride <= 0.0035 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
34	Maximum emission rate from preconstruction permit. HCl Emissions <= 0.07 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
35	Maximum emission rate from preconstruction permit. Tetrachloroethylene <= 0.0025 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
36	Maximum emission rate from preconstruction permit. Toluene <= 0.0865 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
37	Maximum emission rate from preconstruction permit. Trichloroethylene <= 0.0042 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
38	Maximum emission rate from preconstruction permit. Vinyl chloride <= 0.0022 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
39	Maximum emission rate from preconstruction permit. Xylene <= 0.0387 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
40	Maximum emission rate from preconstruction permit. Ethylene dichloride <= 0.0117 lb/hr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
41	Maximum emission rate from preconstruction permit. Tetrachloroethane (1,1,2,2-) <= 0.004 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
42	Maximum emission rate from preconstruction permit. Trichloroethane (1,1,2) <= 0.002 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
43	Maximum emission rate from preconstruction permit. Chloroform <= 0.004 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
	Maximum emission rate from preconstruction permit. HCl Emissions <= 0.307 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
15	Maximum emission rate from preconstruction permit. Benzene <= 0.03 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
16	Maximum emission rate from preconstruction permit. Tetrachloroethylene <= 0.011 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
17	Maximum emission rate from preconstruction permit. Toluene <= 0.379 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
	Maximum emission rate from preconstruction permit. Ethylene dichloride <= 0.051 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
9	Maximum emission rate from preconstruction permit. Acrylonitrile <= 0.053 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
50	Maximum emission rate from preconstruction permit. Trichloroethylene <= 0.018 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
51	Maximum emission rate from preconstruction permit. Carbon disulfide <= 0.049 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
52	Maximum emission rate from preconstruction permit. Vinyl chloride <= 0.01 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
53	Maximum emission rate from preconstruction permit. Carbon tetrachloride <= 0.015 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
54	Maximum emission rate from preconstruction permit. Xylene <= 0.17 tons/yr. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
55	Methane: Requirement to continuously monitor and continuously record the percentage of methane in the landfill gas. [N.J.A.C. 7:27-22.16(e)]	Other: Methane Gas Analyzer. Continuously:[N.J.A.C. 7:27-22.16(e)].	Methane: Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. [N.J.A.C. 7:27-22.16(e)]	None.
56	During startup and shutdown periods smoke emissions no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. The engine startup and shutdown time shall be less than 5 minutes. Opacity <= 20 %. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
57	Smoke emissions no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds, except for startups or shutdowns. The engine startup and shutdown time shall be less than 5 mins. Opacity <= 10 %. [N.J.A.C. 7:27-22.16(e)]	None.	None.	None.
58	Fuel type limited to landfill gas. [N.J.A.C. 7:27-22.16(e)]	None.	None.	Trolle.

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Emission Unit:

U2 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Normal Firing Landfill Gas

The requirements for this item are identical to those for: U1 OS1

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:

U3 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Normal Firing Landfill Gas

The requirements for this item are identical to those for: U1 OS1

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:

U4 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Lean Burn Reciprocating Engine

The requirements for this item are identical to those for: U1 OS1

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:

U5 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Lean Burn Reciprocating Engine

The requirements for this item are identical to those for: U1 OS1

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Specific Requirements

Emission Unit:

U6 Lean Burn Reciprocating Engine

Operating Scenario:

OS1 Lean Burn Reciprocating Engine

The requirements for this item are identical to those for: U1 OS1

BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
2 2	Stack Testing Requirements: Conduct a comprehensive stack test at emission points 7 through 12 at least 18 months prior to the expiration of the approved operating permit to demonstrate compliance with the CO, NOx, TSP, VOC, SO2, and opacity emission limits. Test shall be conducted at or near maximum load.	Monitored by stack emission testing every 5 years, based on any 60 minute period. Stack test shall be conducted for CO, NOx, TSP, VOC, SO2 and opacity emissions. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by stack test results upon occurrence of event. [N.J.A.C. 7:27-21.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Submit a stack test protocol to the Bureau of Technical Services (BTS) at PO Box 437, Trenton, NJ 08625 at least 30 months prior to the expiration of the approved operating permit.
	[N.J.A.C. 7:27-22.16(a)]			Within 30 days of protocol approval, the permittee must contact BTS at 609-530-4041 to schedule a mutually acceptable test date. The stack test report must be submitted to BTS within 45 days after performing the stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial hygienist.
				A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.
T				Test results shall report in opacity, grams/brake horsepower-hour, lbs/hour, lbs/MM Btu, ppm (as needed). [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.18(h)]. [N.J.A.C. 7:27-22.16(o)]
3	NOx Emission Offsets: The landfill gas to energy project shall not operate unless 84.1 tons of nitrogen oxides emission offsets, that meet the criteria established in N.J.A.C. 7:27 - 18.1 et.seq. for NOx emissions, are secured. These offset shall be secured from Saint-Gobain Containers, located at a distance of 70 miles (less than 100 miles) from MRPC, in the city of Millville, Cumberland County, New Jersey. [N.J.A.C. 7:27-18.3(c)1]	None.	None.	Other (provide description): Once initially Obtain emission offsets and submit Purchase Agreement to the Chief, BPP, and REO, prior to initial startup of the facility. [N.J.A.C. 7:27-18.18(c)1]

10 64

New Jersey Department of Environmental Protection

Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
4	Stack Height Above Ground >= 37.5 Feet for the current stacks of all six engines E1 through E6. Operation of any of the six new engines shall not commence until all the six existing stacks (PTI - PT6) of all six existing engines belonging to MRPC are raised from their current height of 23 ft to the height of 37.5 ft or more. [N.J.A.C. 7:27-22.16(a)]	Stack Height Above Ground: Monitored by documentation of construction once initially. [N.J.A.C. 7:27-22.16(o)]	Stack Height Above Ground: Recordkeeping by manual logging of parameter or storing data in a computer data system once initially. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Once initially to the Chief Southern Regional Office, to the Chief Bureau of Technical Services and to the Chief Bureau of preconstruction permits. [N.J.A.C. 7:27-21.16(o)]
	Annual heat input limit based on permit application is 861,108 MMBTU(HHV)/any consecutive 12 months (1844 MMscf/ any consecutive 12 months at 467 BTU/scf HHV) under six (6) engine operational mode. Total annual heat input during any consecutive 12-month period shall be calculated by adding the total heat input for a given month to the total heat input during the preceding 11-month period. Monthly MMBTU fuel use shall be calculated using the following formula: (MMBTU(HHV)/Month) = [(YMMBTU/MMscf) x (MMscf of landfill gas consumed by the engines per month)]. Y = Heating Value of Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel). This procedure will begin the first day following the commencement of the operation of the engines. [N.J.A.C. 7:27-22.16(a)]	Monitored by fuel flow/firing rate instrument continuously. The fuel use monitoring system shall have an accuracy of not less than 1.5%, certified by the manufacturer. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums. The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. Monitored by fuel flow/firing rate instrument at the approved frequency. [N.J.A.C. 7:27-22.16(o)]	Recordkeeping by data acquisition system (DAS) / electronic data storage continuously. Compliance shall be determined based on a consecutive 12-month period computed with monthly sums. Compliance determined by calculating a total monthly MMBtu based on total gas flow and average monthly methane content. [N.J.A.C. 7:27-22.16(o)]	None.

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
6	Annual emission limit for six (6) engines. TSP <= 25.9 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(o)].	TSP: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and following calculations.	None.
			The TSP ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	x
			consumed by the engine during the calendar year) x (1 ton / 2000 lb). A = Emission Factor (0.060 lb/MMBTU) for TSP as stated in this permit. B = Heating	
			Value for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel).	
			The landfill gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)]	
7	Annual emission limit for six (6) engines. PM-10 (Total) <= 25.9 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(o)].	PM-10 (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and following calculations:	None.
			The PM-10 ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	
			consumed by the engine during the calendar year) x (1 ton / 2000 lb). A = Emission Factor (0.060 lb/MMBTU) for PM-10 as stated in this permit. B = Heating Value for Landfill Gas (monthly	
			average of higher heating value of the landfill gas as measured by plant personnel). The landfill gas flow to all engines shall be continuously measured by a flow totalizer,	*
		* **	and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(0)]	*

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requiremen
3	Annual emission limit for six (6) engines. CO <= 356 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(o)].	CO: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and following calculations:	None.
			The CO ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	
			consumed by the engine during the calendar year) x (1 ton / 2000 lb).	
		*	A = Emission Factor (0.83 lb/MMBTU) for CO as stated in this permit. B = Heating	
	•		Value for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel).	
		MATERIAL CONTRACTOR OF THE CON	The landfill gas flow to all engines shall be	
			continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)]	
	Annual emission limit for six (6) engines. NOx (Total) <= 64.7 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(o)].	NOx (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during	None.
			operation and following calculations: The NOx ton per year value shall be calculated using the following formula:	
			(Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	
	*		consumed by the engine during the calendar year) x (1 ton / 2000 lb). A = Emission Factor (0.150 lb/MMBTU)	
			for NOx as stated in this permit. B = Heating Value for Landfill Gas (monthly	
			average of higher heating value of the landfill gas as measured by plant personnel).	*
			The landfill gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow	
			measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(0)]	

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
10	Annual emission limit for six (6) engines. VOC (Total) <= 20.22 tons/yr. [N.J.A.C. 7:27-22.16(a)]	VOC (Total): Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	VOC (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and following calculations:	None.
			The VOC(Total) ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	
			consumed by the engine during the calendar year) x (1 ton / 2000 lb). A = Emission Factor (0.0470 lb/MMBTU) for VOC as stated in this permit). B =	
			Heating Value for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel).	
			The landfill gas flow to all engines shall be continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-21.16(0)]	
1	Annual emission limit for six (6) engines. HAPs (Total) <= 4.9 tons/yr. [N.J.A.C. 7:27-22.16(a)]	HAPs (Total): Monitored by fuel flow/firing rate instrument continuously. [N.J.A.C. 7:27-22.16(o)]	HAPs (Total): Recordkeeping by manual logging of parameter or storing data in a computer data system annually.	None.
			The HAPs ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B BTU/scf) x (MMscf of landfill gas	
			consumed by the engine during the calendar year) x (1 ton / 2000 lb). A = Emission Factor (0.0114 lb/MMBTU) for HAPs as stated in this permit. B =	
			Heating Value for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel). The landfill gas flow to all engines shall be	
		•	continuously measured by a flow totalizer, and the monthly landfill gas flow measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(o)]	

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	Annual emission rate for six (6) engines. SO2 <= 29.7 tons/yr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by grab sampling semiannually: once every six months; six month cycle shall begin on January I and July I of each year. Three grab samples of the fuel gas shall be taken at the same time. This shall be done every 6 months. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by other recordkeeping method (provide description) semiannually: once every six months; six month cycle shall begin on January 1 and July 1 of each year Take the result of % of sulfur in fuel before combustion (the average of the three tests) and volume of gas burned in the respective calendar year. With both figures, calculate SO2 tons per year by summing the first 6 month cycle and the second six month cycle. [N.J.A.C. 7:27-22.16(o)]	Other (provide description): As per the approved schedule. The six month cycle shall begin on January 1 and July 1 of each year. Submit results with semi-annual treatment system report to EPA. [N.J.A.C. 7:27-22.16(a)]
13	Annual emission limit for six (6) engines. Hydrogen chloride <= 3.4 tons/yr. [N.J.A.C. 7:27-22.16(a)]	Other: Monitored by fuel flow/firing rate instrument continuously.[N.J.A.C. 7:27-22.16(o)].	Hydrogen chloride: Recordkeeping by manual logging of parameter or storing data in a computer data system each month during operation and following calculations:	None.
			The HCl ton per year value shall be calculated using the following formula: (Ton/Year) = (A lb/MMBTU) x (B MMBTU/MMscf) x (MMscf of landfill gas consumed by the engine during the calendar	
			year) x (1 ton / 2000 lb). A = Emission Factor (0.0079 lb/MMBTU) for HCl as stated in this permit. B = Heating Value for Landfill Gas (monthly average of higher heating value of the landfill gas as measured by plant personnel).	
			The total fuel flow to all engines shall be continuously measured by a flow totalizer, and the monthly measurements shall be manually recorded. [N.J.A.C. 7:27-22.16(0)]	
	All requests, reports, applications, submittals, and other communications required by 40 CFR 60 shall be submitted in duplicate to the EPA Region 2 Administrator. [40 CFR 60.4(a)]		None.	Other (provide description): As per the approved schedule, submit reports to EPA Region 2 as required by 40 CFR 60. Submit Information to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.4(a)]

BOP060001

.

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittel/Action Description
15	Submit a copy of all requests, reports, applications, submittals, and other communication required by 40 CFR 60 to the Metro Regional Enforcement Office of NJDEP. [40 CFR 60.4(b)]	None.	None.	Other (provide description): As per the approved schedule, submit reports to Metro Regional Office as required by 40 CFR 60. Submit Information to: Metro Regional Office, NJDEP, 2 Babcock Place, West Orange, New Jersey, 07052. [40 CFR 60.4(b)]
	A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in section 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]	None.	None.	Comply with the requirement: Upon occurrence of event submit notification to EPA Region 2 and the Metro Regional Office per 40 CFR 60.7. [40 CFR 60.7(a)(4)]
	Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]	None.	Other: Manual logging of Parameter (Permanently Bound). Upon occurrence of event.[40 CFR 60.7(b)].	None.

Date: 8/4/2006

Ref.#	Pp menore recognit entent	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requiremen
18	At all times, including periods of start-up, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operation and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]	None.	None.	None.
	No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.	None.	None.	None.
c c	The owner or operator shall route all the collected gas to a control system that complies with the requirements in either paragraph 60.752(b)(2)(iii) (A), (B), or (C) 40 CFR 60.752(b)(2)(iii)]	None.	None.	Comply with the requirement: As per the approved schedule. Submit protocol, conduct tests and submit results. Refer to stack testing requirements specified in this
d d 4 cc th at	The owner or operator shall operate the ollection system such that all collected asses are vented to a control system esigned and operated in compliance with 0 CFR 60.752(b)(2)(iii). In the event the ollection or control system is inoperable, are gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to e atmosphere shall be closed within 1 our. [40 CFR 60.753(e)]	None.	None.	permit. [40 CFR 60.754(d)] Comply with the requirement: As per the approved schedule. In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within I hour. [40 CFR 60.753(e)]

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
22	The owner or operator shall operate the control or treatment system at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]	None.	None.	None.
23	The provisions of NSPS Subpart WWW apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)]	None.	None.	None.
24	Each owner or operator shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment. [40 CFR 60.757(e)]	None.	None.	Submit a report: As per the approved schedule. The equipment removal report shall contain all of the following items: (i) A copy of the closure report submitted in accordance with 40 CFR 60.757(d); (ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and (iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year. [40 CFR 60.757(e)]
25	Other Gaseous Fuel Usage <= 1,844 MMft^3/yr of treated landfill gas for six engines. [N.J.A.C. 7:27-22.16(a)]	Other Gaseous Fuel Usage: Monitored by gas use totalizing meter continuously, based on a consecutive 12 month period (rolling 1 month basis). The permittee shall install, calibrate and maintain the monitor(s) in accordance with the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]	Other Gaseous Fuel Usage: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
26	No owner or operator subject to NSPS standards in Part 60, shall build, erect, install, or use any article, machine, equipment, or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged in the atmosphere. [40 CFR 60.12]	None.	None.	None.
27	Treatment of landfill gas includes: filter, chiller, compressor, generator, and /or turbine. The treatment system must not have any vents or atmospheric emissions. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
	Ocean Energy Corporation owns and operates the compression, de-watering, and filtering equipment and processes that are used to treat the landfill gas that is received from the Ocean County Landfill. The flow of the gas from Ocean County Landfill to Ocean Energy Corporation is fully automated.	None.	None.	None.
	The gas treatment system used at Ocean Energy Corporation is not equipped with atmospheric vents. Therefore, all of the landfill gas received by the system is directed to the IC engines for use as a fuel. [N.J.A.C. 7:27-22.16(a)]			

Date: 8/4/2006

Rcf.#	Applicable Requirement	. Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
.9	The facility shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning process; and air pollution control and monitoring equipment used to comply with this standard. During periods of startup, shutdown, and malfunction, the facility must operate and maintain the affected source in accordance with the procedures specified in the SSM plan. [40-CFR 63.1955]	None.	Other: When actions taken by the owner/operator during a startup, shutdown, or malfunction are consistent with the procedures specified in the affected source's SSM plan, the owner/operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. In addition, the owner/operator must keep records of these events as specified in 63.10(b), including records of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner/operator shall confirm that actions taken during the startup, shutdown, and malfunction were consistent with the SSM plan in the semiannual report as required in 63.10(d)(5).[40 CFR 63.1955].	Submit a report: As per the approved schedule If an action taken by the facility is not consistent with the SSM plan, and the affected source exceeds the relevant emission standard, then the owner/operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the SSM plan, followed be a letter within 7 working days after the end of the event. EPA or NJDEP may at any time request in writing that the facility submit a copy of the SSM plan (or a portion thereof) which is maintained at the affected source. Upon receipt of such a request, the facility must promptly submit a copy of the requested plan to EPA or NJDEP. EPA or NJDEP must request that the facility submit a SSM plan whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a plan. If the facility claims that any portion of such a SSM plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act of 40CFR2.301, the material which is claimed as confidential must be clearly designated in the submission. [40 CFR 63.1955]
30	During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source, including APC and monitoring equipment, in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph 40 CFR 63.6(e)(3)(i). [40 CFR 63.6(e)(ii)]	None.	None.	None.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requiremen
	The owner or operator of an affected source must keep records of actions taken during a startup, shutdown, or malfunction, which are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, including records of the occurence and duration of each startup, shutdown, and malfunction of operation and each malfunction of the APC and monitoring equipment. [40 CFR 63.6(e)(3)(iii)]	None.	Recordkeeping by manual logging of parameter upon occurrence of event The owner and operator shall maintain relevant records for such source of: (1) The occurrence & duration of each startup, shutdown, or malfunction of operation (i.e. process equipment); (2) The occurrence and duration of each malfunction of the required air pollution control (APC) and monitoring equipment; (3) All required maintenance performed on the APC and monitoring equipment; (4) Actions taken during periods of startup, shutdown, and malfunction (including	Submittal/Action Requirement Submit a report: Semiannually beginning within 6 months of initial start-up. The startup, shutdown, or malfunction report shall consist of a letter containing: name, title, and signature of the owner or operate and shall be submitted to the Administrate. The report shall be delivered by the 30th of following the end of each calendar half. Treport shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. [40 CFR 63.10(d)(5)(i)]
			corrective actions to restore malfunctioning process and APC and monitoring equipment to its normal or usual manner of operation) when such actions are different from the	
	N		procedures specified in the affected source's startup, shutdown, and malfunction plan; (5) All information necessary to demonstrate conformance with the affected	
			source's startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore	
			malfunctioning process and APC and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The	
			information needed to demonstrate conformance witht he startup, shutdown, and malfunction plan may be recorded using a "checklist", or some other effective form	
1			of recordkeeping, in order to minimize the recordkeeping burden for conforming events). [40 CFR 63.10(b)(2)]	
3 3 3	If the startup, shutdown, and malfunction plan fails to address or inadequately address an event, the owner or operator of an affected source must revise the startup, shutdown, and malfunction plan of such a source within 45 days after the event. [40 CFR 63.6(e)(3)(viii)]	None.	None.	Submit a report: Upon occurrence of event Each startup, shutdown, and malfunction plan revision must be reported in the semiannual report required by 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(viii)]

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	For the purposes of the landfill monitoring and SSM plan requirements, deviations as defined in (40 CFR 63. 1990) include the items in paragraphs (a) through (c) of this section. (a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded. (b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period (refer to 40 CFR 63.1975) does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. [40 CFR 63.1965]	None.	None.	Submit a report: Upon occurrence of event to the extent this requirement may be applicable to equipment owned or operated by permittee, i.e. sulfatreat, filter, chiller, compressor, generator, and turbine. The report shall consist of a telephone call or facsimile and shall be submitted within 2 working days after commencing action, followed by a letter delivered or postmarked within 7 working days after the end of an event. [40 CFR 63.10(d)(5)(ii)]
34	For equipment subject to MACT, malfunctions shall be corrected as soon as practicable after their occurrence, in accordance with the startup, shutdown, and malfunction plan required under 40 CFR 63.6(e)(3). [40 CFR 63.6(e)(1)(ii)]	None.	None.	Comply with the requirement: Upon occurrence of event. Correct the malfunction as soon as practicable, in accordance with the startup, shutdown, and malfunction plan. [40 CFR 63.6(e)(1)(ii)]
35	The non-opacity emission standards shall apply at all times except during periods of startup, shutdown, and malfunction. [40 CFR 63.6(f)(1)]	None.	None.	None.
36	An owner or an operator of a landfill gas treatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 60.756(d)]	None.	None.	Submit a report: As per the approved schedule The six month cycles shall begin on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.756(d)]
37	The permittee shall submit a periodic emission monitoring protocol to the Department for review and approval. The periodic emission monitoring equipment protocol shall be approved prior to startup. [N.J.A.C. 7:27-22.16(a)]			Submit an equipment protocol: Within 30 days from the date of the approved permit to the Department for review and approval. [N.J.A.C. 7:27-22.16(o)]

Ref.#	11 11 11 11 11 11	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
38	All gas received by Manchester Renewable Power Corporation must be sent to the treatment system, before being sent to the engines. If the treatment system is not operating at manufacturer's specification, the landfill gas may not be used by any of the six engines and must be flared at Ocean County Landfill. [40 CFR 60.752(b2)(iii)(c)]	None.	None.	Submit a report: Every six months on January I and July I of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable. Reports are due 30 days after the reporting period.
				The six month cycles shall begin on January 1 and July 1.
				Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.752]

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
39	Operate a gas treatment system for the landfill gas (LFG) prior to combustion in the six reciprocating internal combustion engine. The treatment system shall include (in this order):	None.	None.	None.
	1) A Primary filter vessel that contains coalescing filter, which is designed to remove particles in the gas stream that are 0.3 microns and larger. Condensate collected by the coalescing filter falls to the bottom of the vessel where it is immediately transferred by gravity to a sump that transfers the liquid back to the landfill for processing.			
	2) Gas blowers (four separate blowers) for compression of the de-watered LFG.			
	3) An air-to-gas cooler to reduce the temperature of the gas (which is heated by the blower during gas compression).			
	4) A polishing filter vessel that contains coalescing filter, which is designed to remove particles in the gas stream that are 0.3 microns and larger. Condensate collected by the coalescing filter falls to the bottom of the vessel where it is immediately transferred by gravity to a sump that transfers the liquid back to the landfill for processing.			
	The treatment system qualifies as a control system pursuant to 40 CFR 60 Subpart WWW, consistent with past USEPA determinations.			
	Monitoring parameters, to ensure proper operation of the treatment system, are included under 40 CFR 60.752(b)(2)(iii)]. [N.J.A.C. 7:27-22.16(a)]			

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
42	Operate the facility such that all collected gases are routed to a control system (the treatment system) designed and operated in compliance with 40 CFR 60.752(b)(2)(iii)(C). In the event the control system (the treatment system) is inoperable, the gas mover system must be shut down and the landfill gas must be sent to the flare, located at Ocean County Landfill. [40 CFR 60.752(b)]	Other: The time duration of malfunction of the treatment system must be recorded. The standard operating procedures for malfunction of the landfill gas treatment system is to: 1. If the landfill gas is determined to be venting form the gas treatment system, the equipment and processes will be immediately isolated from the Ocean County Landfill gas collection system. 2. An investigation of the equipment that caused the malfunction will be performed and corrective actions implemented. 3. After the cause of the malfunction has been identified and corrective actions implemented, the fuel use and electricity generation processes will be restarted using the procedures specified in the SSM plan. 4. The appropriate SSM reporting forms and documents must be completed. Duration is the time it takes from discovery of the malfunction to Step 3 specified in the preceding text (unless continuous monitoring records indicate the malfunction started earlier). 5. Refer to operations and Maintenance Manuals as determined to be necessary. [40 CFR 60.752].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The time duration of malfunction of the treatment system must be recorded. [40 CFR 60.752]	Submit a report: Every six months on January I and July I of each year but starte no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, it applicable. The six month cycles shall begin on January I and July I. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.752]
	If the treatment system or the engines are not operating according to the applicable requirements and the manufacturer's specifications, the engines and the treatment system must be shutdown in one hour or less. After the shut down is complete, the landfill gas must be returned to Ocean County Landfill. [40 CFR 60.753(e)]	Other: The time duration of shutdown of the engines or the treatment system must be monitored. [40 CFR 60.753(e)].	Recordkeeping by manual logging of parameter or storing data in a computer data system upon occurrence of event. The time duration of shutdown of the engines or the treatment system must be recorded. [40 CFR 60.753(e)]	Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable. The six month cycles shall begin on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.753(e)]

Date: 8/4/2006

Rcf.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
44	Operate the Treatment System's Pressure Discharge Blower at 0.5 psig or greater. [40 CFR 60.756(d)]	Monitored by pressure indicator continuously. The pressure shall be monitored with a pressure switch that is located after the polishing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager) of an exceedance condition (i.e. the set point of the switch has been tripped). If the pressure of the gas in the treatment system monitored after the polishing filter vessel is less than 0.5 psig, the electricity generation processes will be shut down and an investigation of the equipment will be performed and corrective actions implemented prior to startup. [40 CFR 60.756(d)]	Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure less than 0.5 psig, and any corrective action taken to restore the pressure back to 0.5 psig and greater shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.757(f)]	Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable. The six month cycles shall begin on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.758(c)(iii)]
15	Pressure Drop <= 2 psi d. The pressure differential across the primary coalescing filter vessel (vacuum side of the blowers) of the treatment system shall be equal to or less than 2 psid (pound per square inch differential). The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.756(d)]	Pressure Drop: Monitored by pressure indicator each hour during operation. The pressure drop across each of the primary coalescing filter vessel is greater than 2.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.756(d)]	Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 2.0 psid, and any corrective action taken to restore the pressure back to 2.0 psid and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.757(f)]	Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable. The six month cycles shall begin on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886 [40 CFR 60.758(c)(iii)]

Date: 8/4/2006

		Tacinty Specific	- requirements	*
Rcf.#	T Product reclairement	Monitoring Requirement	Recordkeeping Requirement	Submittel/Action D.
.7	Pressure Drop <= 3 psi d. The pressure differential across the polishing coalescing filter vessel (pressure side of the blowers and downstream of gas cooler) of the treatment system shall be equal or less than 3 psid (pound per square inch differential). The polishing filter (pressure side of blower and downstream of the gas cooler) of the treatment system should be equal or less than 2 psid. [40 CFR 60.756(d)]	Pressure Drop: Monitored by pressure indicator each hour during operation. The pressure drop across each of the primary coalescing filter vessel is greater than 3.0 psid, the electricity generation processes shall be shut down and the associated filter must be replaced and/or investigations shall be performed to evaluate potential malfunctions of upstream LFG de-watering equipment and corrective actions implemented prior to startup. [40 CFR 60.756(d)]	Pressure Drop: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any pressure differential greater than 3.0 psid, and any corrective action taken to restore the pressure back to 3.0 psid and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.757(f)]	Submittal/Action Requirement Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, it applicable. The six month cycles shall beging on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.758(c)(iii)]
	Temperature <= 130 degrees F. The temperature of the air-to-gas cooler of the treatment system shall be maintained at a temperature less than or equal to 130 degrees F. [40 CFR 60.756(d)]	Temperature: Monitored by temperature instrument continuously. The temperature shall be monitored with a temperature switch set at 130 degrees F, that is located after the polishing coalescing filter vessel and notifies a plant operator (by audio alarm and/or phone communication to an operator carried pager of an exceedance (i.e. the set point of the switch has been tripped.	Temperature: Recordkeeping by manual logging of parameter or storing data in a computer data system daily. Any temperature greater than 130 degrees F, and any corrective action taken to restore the temperature to 130 degrees F and less shall be recorded daily. Treatment system component data must be kept on site for seven years. [40 CFR 60.757(f)]	Submit a report: Every six months on January 1 and July 1 of each year but started no sooner than three months after the effective date of the approved permit. The first report shall include data for the three months preceding the reporting half-year, if applicable. The six month cycles shall begin on January 1 and July 1.
	An owner or an open-type C. L. 1911	If the temperature of the gas in the treatment system monitored after the polishing coalescing filter vessel is greater than 130 degrees F the electricity generation processes will be shut down immediately, and an investigation of the equipment shall be performed and corrective actions implemented prior to startup. [40 CFR 60.756(d)]		Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.758(c)(iii)]
1	An owner or an operator of a landfill gas creatment system must submit a semi-annual report to EPA describing the monitoring and operational practices. [40 CFR 60.756(d)]	None.	None.	Submit a report: As per the approved schedule The six month cycles shall begin on January 1 and July 1. Submit semi-annual report to: Air Compliance Branch EPA Region 2 290 Broadway New York, New York 10007-1886. [40 CFR 60.756(d)]

BOP060001

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
49	For landfills that use a device other than an open flare or enclosed combustor to control the landfill gas (the treatment system) the owner or operator will provide information satisfactory to the Administrator describing the operation of the control device (the treatment system), the operating parameters that would indicate proper performance and appropriate monitoring procedures. The Administrator will review the information and either approve it or request that additional information be submitted. [40 CFR 60.756(d)]	None.	None.	Obtain approval: As per the approved schedule i.e. The owner or operator shall obtain approval of the treatment system plar from the Administrator within 180 days of initial startup of the Ocean Energy Corporation Engines. The treatment system plan was submitted to the Department on July 20, 2006. This plan was faxed to EPA by the Department on August 4, 2006. [40 CFR 60.756(d)]
50	The landfill source shall keep up-to-date, readily accessible records for the life of the control equipment (the treatment system). Records of subsequent tests or monitoring shall be maintained for a minimum of 7 years. Records of the treatment system devices' specifications must be kept until the equipment is removed. [40 CFR 60.758(f)]	None.	Other: Keep records on readily-accessible files for seven years. Treatment system component data must be kept on site for seven years. Records of the treatment system devices' specifications must be kept until the equipment is removed. [40 CFR 60.758(a)].	None.
51	Each owner or operator shall submit reports every 6 months to the Administrator. For enclosed combustion devices and flares, reportable exceedances are defined under 40 CFR 60.758 (c) [40 CFR 60.757(f)] and [40 CFR 63.1980(a)] [40 CFR 60.c]	None.	None.	Submit a report: As per the approved schedule to the extent this requirement may be applicable to equipment owned or operated by permittee, i.e. filter, chiller, compressor, generator, and turbine. The biannual report shall include the following information: (1) Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(b). (2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of the bypass flow as specified under 40 CFR 60.756. (3) Description and duration of all periods when the control device was not operating for a period exeeding one hour and length of time the control device was not operating. [40 CFR 60.757(f)] & [40 CFR 63.1980(a)]. [40 CFR 60.756]

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	Because the facility(MRPC) is required to install and monitor a control system under 40 CFR 60 Subpart WWW, the facility must comply with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions of part 63 as specified in table 1 of Subpart AAAA. [40 CFR 63.1955(a)]		None.	None.

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	PM-10 (Total) <= 0.98 lb/hr. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period. The permittee shall stack test once initially, once at the end of second year of operation of engine, and thereafter prior to permit	PM-10 (Total): Recordkeeping by stack test results once initially and prior to permit renewal. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. For initial and renewal testing, refer to stack testing requirements specified in this permit
		renewal.		For interim testing, submit protocol 60 day prior to end of second year of operation of
		The Department reserves the right to additional stack testing if necessary. [N.J.A.C. 7:27-22.16(o)]		engine to the Chief BTS for review and approval. Within 30 days of protocol approval, the permittee must contact BTS at
				609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 120 days from the date of the approved protocol. The stack test report
		en e		must be submitted Chief BPP and to Chief BTS within 45 days after performing the stack test pursuant to N.J.A.C.
				7:27-22.19(d). The test results must be certified by a New Jersey licensed professional engineer or certified industrial
		* - 7		hygienist. A copy of the test results must be submitted
				with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.
				Test results shall report in gr/bh-hr, lbs/hour, lbs/MM Btu, ppm (as needed) . [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C.

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
	PM-10 (Total) <= 0.2 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)]	PM-10 (Total): Monitored by stack emission testing at the approved frequency, based on any 60 minute period.	PM-10 (Total): Recordkeeping by stack test results at the approved frequency. [N.J.A.C. 7:27-22.16(0)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule.
		The permittee shall stack test once initially, once at the end of second year of operation		For initial and renewal testing, refer to stack testing requirements specified in this permit
		of engine, and thereafter prior to permit renewal.		For interim testing, submit protocol 60 day prior to end of second year of operation of engine to the Chief BTS for review and
		The Department reserves the right to additional stack testing if necessary. [N.J.A.C. 7:27-22.16(o)]		approval. Within 30 days of protocol approval, the permittee must contact BTS at
				609-530-4041 to schedule a mutually acceptable test date. The stack test must be conducted within 120 days from the date of
į	1.0			the approved protocol. The stack test report must be submitted Chief BPP and to Chief BTS within 45 days after performing the
				stack test pursuant to N.J.A.C. 7:27-22.19(d). The test results must be certified by a New Jersey licensed
				professional engineer or certified industrial hygienist.
				A copy of the test results must be submitted with the operating permit renewal application due at least 12 months prior to expiration of the Operating Permit.
				Test results shall report in gr/bh-hr, lbs/hour, lbs/MM Btu, ppm (as needed) . [N.J.A.C. 7:27-22.18(e)] and [N.J.A.C. 7:27-22.16(o)]

Date: 8/4/2006

Ref.#	Applicable Requirement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
8	CO <= 13.54 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and every 5 years. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]
9	CO <= 356 ppmvd @ 15% O2. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by periodic emission monitoring each month during operation, based on any consecutive 30-minute period using a test method 22, 30, 34 or a method approved by the Department. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable Submit the report of the monthly readings to the Chief BTS and Chief BPP. [N.J.A.C. 7:27-22.16(o)]
10	CO <= 13.54 lb/hr. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by periodic emission monitoring each month during operation, based on any consecutive 30-minute period using a test method 22, 30, 34 or a test method approved by the Department. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by manual logging of parameter each month during operation. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable Submit the report of the monthly readings to the Chief BTS and Chief BPP. [N.J.A.C. 7:27-22.16(o)]
11	CO <= 500 ppm @ 15% O2. [N.J.A.C. 7:27-16.10(b)]	None.	None.	None.
12	CO <= 2.75 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. [N.J.A.C. 7:27-22.16(o)]	CO: Recordkeeping by stack test results once initially and every 5 years. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]
13	CO <= 2.75 grams/brake horsepower-hour. [N.J.A.C. 7:27-22.16(a)]	CO: Monitored by periodic emission monitoring at the approved frequency: daily for the first month of operation of engine, once every week for the next five months and then once a month thereafter to determine compliance. [N.J.A.C. 7:27-22.16(0)]	CO: Recordkeeping by manual logging of parameter at the approved frequency. The records of all the readings taken by the periodic emission monitor shall be recorded and maintained in a manner acceptable to the Department. [N.J.A.C. 7:27-22.16(o)]	Submit a report: Every year beginning on the first of January but no sooner than three months following the effective date of the approved permit. The first report shall include data for the three months preceding the reporting year, if applicable. Submit the yearly report to Chief BTS and to Chief BPP. [N.J.A.C. 7:27-22.16(0)]
14	SO2 <= 1.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	SO2: Monitored by stack emission testing once initially and every 5 years, based on any 60 minute period. [N.J.A.C. 7:27-22.16(o)]	SO2: Recordkeeping by stack test results once initially and every 5 years. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]

BOP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Date: 8/4/2006

Ref.# Applicable Requirement Monitoring Requirement Recordkeeping Requirement Submittal/Action Requirement 15 NOx (Total) <= 2.46 lb/hr. [N.J.A.C. NOx (Total): Monitored by stack emission NOx (Total): Recordkeeping by stack test 7:27-22.16(a)1 Stack Test - Submit protocol, conduct test testing once initially and every 5 years, results once initially and every 5 years. and submit results: As per the approved based on any 60 minute period. [N.J.A.C. [N.J.A.C. 7:27-22.16(o)] schedule. Refer to stack testing 7:27-22.16(o)] requirements specified in this permit. NOx (Total) <= 2.46 lb/hr. [N.J.A.C. [N.J.A.C. 7:27-22.16(o)] NOx (Total): Monitored by periodic NOx (Total): Recordkeeping by manual 7:27-22.16(a)] Submit a report: Every year beginning on emission monitoring each month during logging of parameter or storing data in a the first of January but no sooner than three operation, based on any consecutive computer data system each month during months following the effective date of the 30-minute period using a test method 22, 30, operation. [N.J.A.C. 7:27-22.16(o)] approved permit. The first report shall 34 or a test method approved by the include data for the three months preceding Department. [N.J.A.C. 7:27-22.16(o)] the reporting year, if applicable.. Submit the report of the monthly readings to the Chief BTS and Chief BPP. [N.J.A.C. 7:27-22.16(o)] 17 NOx (Total) <= 0.5 grams/brake NOx (Total): Monitored by stack emission NOx (Total): Recordkeeping by stack test horsepower-hour. [N.J.A.C. 7:27-22.16(a)] Stack Test - Submit protocol, conduct test testing once initially and every 5 years, results once initially and every 5 years. and submit results: As per the approved based on any 60 minute period. [N.J.A.C. [N.J.A.C. 7:27-22.16(o)] schedule. Refer to testing requirements 7:27-22.16(o)] specified in this permit. [N.J.A.C. 18 7:27-22.16(o)1 NOx (Total) <= 0.5 grams/brake NOx (Total): Monitored by periodic NOx (Total): Recordkeeping by manual horsepower-hour. [N.J.A.C. 7:27-22.16(a)] Submit test results: Every year beginning on emission monitoring each month during logging of parameter each month during the first of January but no sooner than three operation, based on any consecutive operation. [N.J.A.C. 7:27-22.16(o)] months following the effective date of the 30-minute period using a test method 22, 30, approved permit. The first report shall 34 or a test method approved by the include data for the three months preceding Department. [N.J.A.C. 7:27-22.16(o)] the reporting year, if applicable.. Submit the yearly report of the monthly readings to the Chief BTS and Chief BPP. [N.J.A.C. 7:27-22.16(o)] 19 Other Gaseous Fuel Usage <= 307.3 Other Gaseous Fuel Usage: Monitored by Other Gaseous Fuel Usage: Recordkeeping MMft^3/yr per engine of landfill gas. gas use totalizing meter daily, based on a by manual logging of parameter each month [N.J.A.C. 7:27-22.16(a)] consecutive 12 month period (rolling 1 during operation, electric generating month basis), electric generating records records and total fuel flow to all engines, and total facility fuel flow. which shall be continuously measured by a flow totalizer. The monthly flow The permittee shall install, calibrate and measurements shall be manually recorded. maintain the monitor(s) in accordance with [N.J.A.C. 7:27-22.16(o)] the manufacturer's specifications. The monitor(s) shall be ranged such that the allowable value is approximately mid-scale of the full range current/voltage output. [N.J.A.C. 7:27-22.16(o)]

MANCHESTER RENEWABLE POWER CORP LES (78901)

BQP060001

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	11 qui ement	Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
20	NOx (Total) <= 2.5 grams/brake horsepower-hour. On and after March 7, 2007, this limit will be revised for engines used for electric generation to 1.5 gms-bhp-hr or an emission rate which is equivalent to 80 percent NOx reduction from the uncontrolled NOx emission level. [N.J.A.C. 7:27-19.8]	NOx (Total): Monitored by stack emission testing once initially and every 5 years, based on the average of three 1-hour tests. For any equipment or source operation which was in operation prior to January 1, 1995, the owner or operator shall demonstrate compliance by May 31, 1996. For any equipment or source operation which commences operation or is altered after January 1, 1995, the owner or operator shall demonstrate compliance within 180 days from the date on which the source operation commences operation. [N.J.A.C. 7:27-19.15(a)2]	NOx (Total): Recordkeeping by stack test results once initially and every 5 years. [N.J.A.C. 7:27- 8.13(d)3]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-19.15(a)2]
1	HCl Emissions <= 0.13 lb/hr. [N.J.A.C. 7:27-22.16(a)]	None.	None.	None.
2	Oxygen > 6 %. [N.J.A.C. 7:27-22.16(a)]	Oxygen: Monitored by stack emission testing once initially and every 5 years, based on an instantaneous determination and thereafter using a periodic emissions monitor, monthly, based on an instantaneous determination. [N.J.A.C. 7:27-22.16(o)]	Oxygen: Recordkeeping by stack test results once initially and every 5 years and by manual logging of portable emissions monitoring results thereafter. [N.J.A.C. 7:27-22.16(o)]	Stack Test - Submit protocol, conduct test and submit results: As per the approved schedule. Refer to stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]

Date: 8/4/2006

Date: 8/4/2006

Ref.#		Monitoring Requirement	Recordkeeping Requirement	Submittal/Action Requirement
23	Adjust the combustion process in accordance with N.J.A.C.7:27-19.16 each calendar year. Record NOx and CO conc. after each adjustment and the O2 conc. at which NOx and CO were measured. [N.J.A.C. 7:27-16.10(e)]	Other: Adjust combustion process in accordance to the manufacturer's recommended procedures and maintenance schedule.[N.J.A.C. 7:27-16.8(c)].	Recordkeeping by manual logging of parameter or storing data in a computer data system at the manufacturer's specified frequency cin a logbook or readily accessible computer data system and retained for a minimum of five years, to be made accessible to the Department upon request. Such record shall contain the following information for each adjustment:	None.
			The date of the adjustment and the times at which it began and ended;	
			2. The name, title and affiliation of the person who made the adjustment;	
			3. The type of procedure and maintenance performed;	
			4. The concentration of NOx, CO and O2 measured before and after the adjustment was made, and	
			5. The type and amout of fuel use over the 12 months prior to adjustment. [N.J.A.C. 7:27-19.16(h)]	
	Methane: Requirement to continuously monitor and continuously record the percentage of methane in the landfill gas. [N.J.A.C. 7:27-22.16(a)]	Other: Methane Gas Analyzer. Continuously.[N.J.A.C. 7:27-22.16(o)].	Methane: Recordkeeping by data acquisition system (DAS) / electronic data storage every 15 minutes. [N.J.A.C. 7:27-21.16(o)]	None.
5	During startup and shutdown periods smoke emissions no greater than 20% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds. The engine startup and shutdown time shall be less than 5 minutes. Opacity <= 20 %. [N.J.A.C. 7:27-22.16(0)]	None.	None.	None.
5	Smoke emissions no greater than 10% opacity, exclusive of visible condensed water vapor, for more than 10 consecutive seconds, except for startups or shutdowns. The engine startup and shutdown time shall be less than 5 mins. Opacity <= 10 %. [N.J.A.C. 7:27-22.16(0)]	Opacity: Monitored by stack emission testing once initially and every 5 years, based on the averaging period as per approved sampling protocol. Refer to the stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]	Opacity: Recordkeeping by stack test results at the approved frequency. Refer to the stack testing requirements specified in this permit. [N.J.A.C. 7:27-22.16(o)]	Submit a stack test report: As per the approved schedule. [N.J.A.C. 7:27-22.16(o)]

MANCHESTER RENEWABLE POWER CORP LES (78901)

BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Facility Specific Requirements

Ref.#	Applicable Requirement	Monitoriug Requirement	Recordkeeping Requirement	Submittel/Action D.
27	Fuel type limited to treated landfill gas. [N.J.A.C. 7:27-22.16(a)]	None.	None.	Submittal/Action Requirement None.

1--- 47 C

PREVENTION OF SIGNIFICANT DETERIORATION PERMIT

Section E

Facility Name: MANCHESTER RENEWABLE POWER CORP LES

Facility ID No.: 78901 Activity ID No.: BOP060001

INVENTORIES

Equipment Inventory Emission Point Inventory Emission Unit Inventory

Date: 8/4/2006

New Jersey Department of Environmental Protection Equipment Inventory

Equip. NJID	Facility's Designation	Equipment Description	Equipment Type	Certificate Number	Install Date	Grand- Fathered	Last Mod. (Since 1968)	Equip. Set ID
El	1	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123341		No.		
E2	2	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123342		No		
E3	3	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123343		No	4 ,	
E4	4	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123344		No		
E5	5	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123345	×	No	-	
E6	6	Lean Burn Reciprocating Engine	Stationary Reciprocating Engine	123346		No		
E7	OEC Engine 1	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine			No		
E8	OEC Engine 2	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine			No		* ₂
E9	OEC Engine 3	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine			No		-
E10	OEC Engine 4	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine			No		
E11	OEC Engine 5	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine			No		
E12	OEC Engine 6	CAT 3520 gas IC engine genset	Stationary Reciprocating Engine	,		No		

Date: 8/4/2006

New Jersey Department of Environmental Protection Emission Points Inventory

PT NJID	Facility's Designation	Description	Config.	Equiv. Diam.	Height	Dist. to	Exhaus	st Temp.	(deg. F)	Exh	aust Vol. (a	rfm)	Discharge	PT
PTI	 			(in.)	(ft.)	Prop. Line (ft)	Avg.	Min.	Max.	Avg.	Min.		Direction	Set ID
	1	Exhaust Stack	Round	12	. 38							Max.		
PT2	2	Exhaust Stack	Round				023.0	623.0	825.0	6,249.0	6,249.0	6,249.0	Up	
PT3	3 .		Round	12	38	388	825.0	825.0	825.0	6,249.0	6,249.0	6,249.0	Un	700
113	3	Exhaust Stack	Round	12	38	391	825.0	825.0	825.0	(242.0				
PT4	4	Exhaust Stack	Round	10				625.0	823.0	6,249.0	6,249.0	6,249.0	Up	-
PT5	5		,	12	38	394	825.0	825.0	825.0	6,249.0	6,249.0	6,249.0	Up	_
	3	Exhaust Stack	Round	12	38	400	825.0	825.0	825.0	6,249.0	6240.0			
PT6	6	Exhaust Stack	Round	12	38	404				0,245.0	6,249.0	6,249.0	Up	
PT7	7	OFC Engine 1 automated			36	404	825.0	825.0	825.0	6,249.0	6,249.0	6,249.0	Up	
		OEC Engine 1 exhaust stack	Round	18	38	25	900.0	850.0	960.0	12,045.0	11,320.0	12,780.0	il-	* 4
PT8	8	OEC Engine 2 exhaust stack	Round	18	38	25	900.0	950.0			11,320.0			
PT9	9	OEC Engine 3 exhaust stack	 			23	900.0	850.0	960.0	12,045.0	11,320.0	12,780.0	Up	
DTIO	-		Round	18	38	25	900.0	850.0	960.0	12,045.0	11,320.0	12,780.0	ln -	
PT10	10	OEC Engine 4 exhaust stack	Round	18	38	25	900.0	850.0	0000					
TII	11	OEC Engine 5 exhaust stack	Round				200.0	630.0	960.0	12,045.0	11,320.0	12,780.0	Jp	Y si
ΥТ12			Round	18	38	25	900.0	850.0	960.0	12,045.0	11,320.0	12,780.0	Jp	
112	12	OEC Engine 6 exhaust stack	Round	18	38	25	900.0	850.0	960.0	12,045.0				
7									200.0	12,043.0	11,320.0	12,780.0	Jp	

MANCHESTER RENEWABLE POWER CORP LES (78901) BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 1 1 Lean Burn Reciprocating Engine

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission	SCC(s)	Ann Oper.		voc	(a	low cfm)		emp. eg F)
OSI					Device(s)	Point(s)		Min.	Max.	Range	Min.	Max.	Min.	Max
031		Normal firing Landfilll Gas	Normal - Steady State	EI		PT1	2-01-008-02		T.		****			

U 2 2 Lean Burn Reciprocating Engine

UOS NJID	Facility's Designation	UOS Description	Operation	Signif.	Control	Emission	SCC(s)	Ann Oper.	iual Hours	voc		low cfm)		emp. eg F)
	2 congination		Type	Equip.	Device(s)	Point(s)	500(5)	Min.	Max.	Range	Min.	Max.	Min.	Max
OSI	2	Nonnal Firing Landfill Gas	Normal - Steady State	E2		PT2	2-01-008-02	•			,			

MANCHESTER RENEWABLE POWER CORP LES (78901) BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 3 3 Lean Burn Reciprocating Engine

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Annual Oper. Hours VOC			Flow (acfm)		Temp. (deg F)	
								Min.	Max.	Range	Min.	Max.	Min.	Max.
OS1	3	Normal Firing Landfill Gas	Normal - Steady State	E3	*	PT3	2-01-008-02		****					

U 4 4 Lean Burn Reciprocating Engine

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Ann Oper. Min.	Hours	VOC Range	(a	flow acfm) Max.		emp. eg F) Max
OSI	4	Lean Burn Reciprocating Engine	Normal - Steady State	E4		PT4	2-01-008-02		17447.	- Attailed		WIAX.	174111.	Wiax

MANCHESTER RENEWABLE POWER CORP LES (78901) BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 5 5 Lean Burn Reciprocating Engine

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Ann Oper. I Min.	Hours	VOC	(ac	ow efm)	(de	mp. eg F)
OSI	5	Lean Burn Reciprocating Engine	Normal - Steady State			PT5	2-01-008-02	IVIII.	Max.	Range	Min.	Max.	Min.	Max

U 6 6 Lean Burn Reciprocating Engine

UOS	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Ann Oper. Min.	Hours	VOC Range	(a	flow icfm) Max.		emp.
OSI	6	Lean Burn Reciprocating Engine	Normal - Steady State	E6		PT6	2-01-008-02		THUA.	Kange	IVIIII.	Max.	Will.	Max

U 7 OEC Engines Six Ocean Energy Corp. CAT 3520 Lean Burn Reciprocating Engines

UOS NJID	Facility's Designation	UOS Description	Operation Type	Signif. Equip.	Control Device(s)	Emission Point(s)	SCC(s)	Ann Oper. I	lours	voc	•	fm)	(de	emp. eg F)
SI	OECI				Device(s)	T OIII(S)		Min.	Max.	Range	Min.	Max.	Min.	Max.
31	OEC1	Lean Burn Reciprocating Engine - OEC1	Normal - Steady State	E7		PT7	2-01-008-02	8,300.0	8,760.0		11,320.0	12,780.0	850.0	960.0
S2	OEC2	Lean Burn Reciprocating Engine- OEC2	Normal - Steady State	E8		РТ8	2-01-008-02	8,300.0	8,760.0		11,320.0	12,780.0	850.0	960.0

MANCHESTER RENEWABLE POWER CORP LES (78901) BOP060001

Date: 8/4/2006

New Jersey Department of Environmental Protection Emission Unit/Batch Process Inventory

U 7 OEC Engines Six Ocean Energy Corp. CAT 3520 Lean Burn Reciprocating Engines

UOS Facility' NJID Designation	Facility's	UOS	Operation		Control		SCC(s)	Annual Oper. Hours		voc	Flow (acfm)		Temp. (deg F)	
		Description	Туре	Equip.	Device(s)	Point(s)	500(8)	Min.	Max.	Range	Min.	Max.	Min.	Max.
OS3	OEC3	Lean Burn Reciprocating Engine- OEC3	Normal - Steady State	E9		PT9	2-01-008-02	8,300.0	8,760.0		11,320.0	12,780.0	850.0	960.0
OS4	OEC4	Lean Burn Reciprocating Engine- OEC4	Normal - Steady State	E10		PT10	2-01-008-02	8,300.0	8,760.0	1 00	11,320.0	12,780.0	850.0	960.0
OS5	OEC5	Lean Burn Reciprocating Engine- OEC5	Normal - Steady State	EII		PT11	2-01-008-02	8,300.0	8,760.0		11,320.0	12,780.0	850.0	960.0
OS6	OEC6	Lean Burn Reciprocating Engine- OEC6	Normal - Steady State	E12		PT12	2-01-008-02	8,300.0	8,760.0		11,320.0	12,780.0	850.0	960.0



ENVIRONMENTAL PROTECTION

State of New Jersey 2006 DEC 29 PM 2: 35 DEPARTMENT OF ENVIRONMENTAL PROTECTION

JON S. CORZINE

Governor

DEPP-APH

LISA P. JACKSON Commissioner

Environmental Regulation
Division of Air Quality
Air Quality Permitting Element
P. O. Box 27
Trenton, NJ 08625-0027

Air Pollution Control Operating Permit Significant Modification and Preconstruction Approval

Permit Activity Number: BOP060001

Program Interest Number: 78901

Mailing Address	Plant Location
Scott Salisbury Manchester Renewable Power Corp. 29261 Wall Street Wixom, MI 48393	MANCHESTER RENEWABLE POWER CORF LES Rt 70 Lakehurst Boro Ocean County

Initial Operating Permit Approval Date: Significant Modification Approval Date: Operating Permit Expiration Date: June 9, 1999 October 4, 2006 June 9, 2004

This significant modification is approved and issued under the authority of Chapter 106, P.L. 1967 (N.J.S.A. 26:2C-9.2). The equipment at the facility must be operated in accordance with the requirements of this permit.

This approval, in response to your application, merges the provisions of the previously approved operating permit and the changes from this significant modification into a single comprehensive permit that replaces the one previously issued. This significant modification adds six new source operations designated as U7 Six Ocean Energy Corp. CAT 3520 Lean Burn Reciprocating Engines. This approval also includes the raising the stack heights of the six existing engines, PT1 through PT 6 from 23 feet to 37.5 feet.

Equipment at the facility referenced by this significant modification is covered by the permit shield, pursuant to the provisions of N.J.A.C. 7:27-22.17. However, this permit shield does not cover physical changes which were undertaken at the facility after March 3, 2003 and for which the facility did not seek an applicability determination for the Prevention of Significant Deterioration rule, codified at 40 CFR 52.21 (PSD), from the United States Environmental Protection Agency (USEPA). The issuance of this permit should not in any way be construed as a determination by the Department that the PSD rules do not apply. Any questions on applicability of PSD should be directed to USEPA Region II, Air Compliance Branch, 21st Floor, 290 Broadway, New York, NY 10007-1866 (Phone: 212-637-4074). Pursuant to N.J.A.C. 7:27-22.33(e), this significant modification consists of both a preconstruction approval and operating permit approval. This operating permit does not include compliance schedules as part of the approved compliance plan.

The permittee shall submit to the Department and to the EPA on forms provided by the Department, at the addresses given below, a periodic compliance certification, in accordance with N.J.A.C. 7:27-22.19 and the schedule for compliance certifications set forth in the compliance plan in this operating permit. The annual compliance certification reporting period will cover the calendar year ending December 31. The annual compliance certification is due to the Department and the EPA within 60 days after the end of each calendar year during which this permit was in effect. Forms provided by the Department can be found on the Department's website at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm.

The annual compliance certification report may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year, as required by paragraph 13 in Section F, General Provisions and Authorities, of this permit, if the annual compliance certification is submitted by January 30.

New Jersey Department of Environmental Protection Air & Environmental Quality Compliance & Enforcement 401 East State Street, P. O. Box 422 Trenton, New Jersey 08625-0422

New Jersey Department of Environmental Protection Air and Environmental Quality Compliance & Enforcement Central Regional Enforcement Office 300 Horizon Center, PO Box 407 Trenton, New Jersey 08625-0407

United States Environmental Protection Agency, Region II Air Compliance Branch 290 Broadway New York, New York 10007-1866

We are including a diskette with an electronic file. This file contains the information included in the paper version of the operating permit. Upon importing this information into your personal computer with RADIUS software, you will have up-to-date information in RADIUS format. RADIUS software, instructions, and help are available at the Department's website at www.state.nj.us/dep/aqpp. We also have an Operating Permit Help Line available from 9:00 AM to 4:00 PM daily, where you may speak to someone about any questions you may have. The Operating Permit Help Line number is 609-633-8248.

If, in your judgment, the Department is imposing any unreasonable condition of approval in this permit modification action, you may contest the Department's decision on the modification and request an adjudicatory hearing pursuant to N.J.S.A. 52:14b-1 et seq. and N.J.A.C. 7:27-22.32(a). All requests for an adjudicatory hearing must be received in writing by the Department within 20 calendar days of the date you receive this letter. The request must contain the information requested in N.J.A.C. 7:27-1.32 and the information on the enclosed Administrative Hearing Request Checklist and Tracking Form.

If you have any questions regarding this permit approval, please call your permit writer, Aliya M. Khan at (609) 292-2169.

pproved by:

ogesh/Doshi

pervisor

Air Quality Permitting Element

Enclosure

CC: Steve Riva, USEPA Region II (diskette containing modified permit)

CRO (w/o enclosure)]

Aliya M. Khan (w/o enclosure)

Administrative Hearing Request Checklist and Tracking Form

I. Document Being Appealed

Name of the Facility	Program Interest (PI) Number	Permit Activity Number	Issuance Date
MANCHESTER RENEWABLE POWER CORP LES	78901	BOP060001	*

II. Contact Information

Name of Person Requesting Hearing	Name of Attorney (if applicable)
Address:	Address:
Telephone:	Telephone:

III. Please include the following information as part of your request:

- A. The date the permittee received the permit decision,
- B. A copy of the document being appealed,
- The legal and factual questions you are appealing;
- A statement as to whether or not you raised each legal and factual issues during the permit application process;
- E. Suggested revised or alternative permit conditions;
- F. An estimate of the time required for the hearing;
- G. A request, if necessary, for a barrier-free hearing location for physically disabled persons;
- H. A clear indication of any willingness to negotiate a settlement with the Department prior to the Departments processing of your hearing request to the Office of Administrative Law;

Mail this form, completed, signed and dated with all of the information listed above, including attachment, to:

- New Jersey Department of Environmental Protection Office of Legal Affairs Attention: Adjudicatory Hearing Requests 401 E. State Street, P.O. Box 402 Trenton, New Jersey 08625
- 2. Mr. Richard Langbein
 Bureau of Operating Permits
 New Jersey Department of Environmental Protection
 401 E. State Street, 2nd Floor, P.O. Box 027
 Trenton, New Jersey 08625
 Phone: (609) 292-0834

Signature	Date

Administrative Hearing Request Checklist and Tracking Form

IV. If you are not the applicant but rather an interested person claiming to be	aggrieved b	y the
permit decision, please include the following information:		

1.	of that normi	desision with your basis and	otice of the permit decision (include a copy
2.		decision with your hearing reques	
. 2.			s been delivered to the applicant for the
,	permit which	s the subject of the permit decisio	n;
3.	A det	alled statement of which findings of	of fact and/or conclusion of law you are
	challenging;		
4.	A des	cription of your participation in any	y public hearings held in connection with
_	the permit app	olication and copies of any written	comments you submitted;
5.	Whet	ner you claim a statutory or consti	tutional right to a hearing, and, if you claim
	such a right, a	reference to the applicable statut	te or explanation of how your property
		iffected by the permit decision;	
6.	If the	appeal request concerns a CAFR	A permit decision, evidence that a copy of
	the request ha	is been delivered to the clerks of t	the county and the municipality in which
		ich is the subject of the permit dec	
7.	Sugge	ested revised or alternative permit	conditions;
8.	An es	timate of the time required for the	hearing;
9.	A req	lest, if necessary, for a barrier-fre	e hearing location for physically disable
	persons;		
10.	A clea	r indication of any willingness to n	egotiate a settlement with the Department
•	prior to the De	partment's transmittal of the heari	ing request to the Office of Administrative
	Law;	•	S que en la compa en la compa de la compa dela compa dela compa de la compa dela compa de la compa de la compa de la compa de la compa
to:	completed, sign	ed and dated with all of the inform	nation listed above, including attachment,
	1.	New Je	ersey Department of Environmental
		Protection	
		Office of Legal Affairs	
		Attention: Adjudicatory Hearing	Requests
		401 East State Street, P.O. Box	
		Trenton, New Jersey 08625-040	
	2.	Mr. Ric	hard Langbein
	•	Bureau of Operating Permits	
		New Jersey Department of Envi	ronmental Protection
		401 E. State Street, 2nd Floor, F	
		Trenton, New Jersey 08625	
		Phone: (609) 292-0834	
		Signature	Date
*		9	

Table of Contents

Facility Name: MANCHESTER RENEWABLE POWER CORP LES Program Interest Number: 78901 Permit Activity Number: BOP060001

Section A

FACILITY PROFILE (ADMINISTRATIVE INFORMATION)

Section B

REASON FOR PERMIT REASON FOR APPLICATION

Section C

POLLUTANT EMISSIONS SUMMARY

Section D

POLLUTION PREVENTION REPORTING

Section E

DEFINITIONS

Section F

GENERAL PROVISIONS AND AUTHORITIES

Section G

COMPLIANCE SCHEDULES

Section H

STATE-ONLY APPLICABLE REQUIREMENTS

Section I

FACILITY SPECIFIC REQUIREMENTS TABLE OF CONTENTS

Section J

FACILITY SPECIFIC REQUIREMENTS

Section K

INVENTORIES

Section A

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

FACILITY PROFILE

Section B

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

REASON FOR PERMIT

The reason for issuance of this permit is to comply with the air pollution control permit provisions of Title V of the federal Clean Air Act, federal rules promulgated at 40 CFR 70, and state regulations promulgated at N.J.A.C. 7:27-22, which requires the state to issue operating permits to major facilities and minor facilities that are in certain designated source categories. This is the operating permit for the facility listed on the cover page, which includes a significant modification is for adding six new source operations designated as "U7 Six Ocean Energy Corp. CAT 3520 Lean Burn Reciprocating Engines". This approval also includes raising the existing stack heights PT1 through PT6 of the six existing engines, from 23 feet to 37.5 feet.

New Jersey has elected to integrate its Title I New Source Review (NSR) preconstruction permits with the new Title V operating permits instead of issuing separate permits. Consequently, the existing preconstruction permit provisions that were previously approved for this facility have been consolidated into this permit. This permit may also include applicable requirements for grandfathered sources.

This permit action consolidates previously approved permit terms and conditions into one single permit for the facility. The New Jersey Department of Environmental Protection (Department) issues this operating permit authorizing the facility to operate equipment and air pollution control devices. In the operating permit application, the facility represented that it meets all applicable requirements of the federal Clean Air Act and the New Jersey Air Pollution Control Act codified at N.J.S.A. 26:2C. Based on an evaluation of the data contained in the facility's application, the Department has approved this operating permit.

This permit allows this facility to operate the equipment and air pollution control devices specified in this permit and emit up to a level specified for each source operation. The signatories named in the application are responsible for ensuring that the facility is operated in a manner consistent with this permit, its conditions, and applicable rules.

Section C

Facility Name: MANCHESTER RENEWABLE POWER CORP LES

Program Interest Number: 78901 Permit Activity Number: BOP060001

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's Potential to Emit (PTE) emissions summary:

Source Categories	Facility Total Potential to Emit (tons per year)									
		Primary							У	
. *	VOC (total)	NO _x	СО	SO ₂	TSP (total)	Other (total)	PM ₁₀ (total)	Pb	HAPs (total)	
Emission Unit Summary	44.9	130.7	507.5	34.2	31.7	NA	31.7	0.0	11.5	
Batch Process Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Non-Source Fugitive Emissions ¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Group Summary	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Emissions ²	44.9	130.7	507.5	34.2	31.7	NA	31.7	0.0	11.5	

VOC Volatile Organic Compounds PM_{10} Particulates under 10 microns

NO_x Nitrogen Oxides

Pb Lead

CO Carbon Monoxide

HAPs Hazardous Air Pollutants

 SO_2 Sulfur Dioxide

TSP

Total Suspended Particulates

Any other air contaminant regulated under the Federal Clean Air Act Other

¹ Not applicable to this facility.

² Total emissions from this facility do not include emissions from Insignificant Sources.

Section C

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

POLLUTANT EMISSIONS SUMMARY

The following table indicates the facility's hazardous air pollutants (HAP) emissions summary:3

HAP	TPY
HCl	3.4
	V

³ Do not sum these values for the purpose of establishing a total HAP potential to emit. See previous page for the allowable total HAP emissions.

Section D

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

POLLUTION PREVENTION REPORTING

General Pollution Prevention Conditions

The following evaluation requirements are included to track the facility's progress in several critical areas identified in the National Environmental Performance Partnership System (NEPPS). Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) are precursors to the air pollutant Ozone, for which New Jersey is non-attainment with the air quality standard for the protection of public health. The control of hazardous air pollutants (HAPs) is also a focus item for the next decade in order to minimize localized hot spots and general urban air toxics levels. Therefore, the Department is requiring evaluation of emission trends at 5-year intervals for major sources of these air contaminants. Also, as part of significant modification applications, proposed major increases of these air contaminants require evaluation of pollution prevention and cross media effects.

The evaluation of these trends requires no increased monitoring. Rather it utilizes existing monitoring data, as reported annually in Emission Statements (for NOx and VOC) and annual Release and Pollution Prevention Reports (for HAPs). The intent of this evaluation is to better utilize the existing data by having the company, the public and the Department review major source trends periodically, as part of the 5-year renewal review and public comment process. The Department requests that the facility-wide trends be presented on graphs for attachment to the public information document for the 5-year renewal.

Pollution prevention includes changes that result in the reduction in use or generation of non-product output per unit of product. Cross media effects are practices that result in transferring the ultimate release or disposal of a contaminant from one environmental medium (e.g. air) to another environmental medium (e.g. water, solid or hazardous wastes).

Information to include with the renewal application:

- 1. The facility will evaluate annual emission trends over the last five years for actual air contaminant emissions of Volatile Organic Compounds (VOC), Nitrogen Oxides (NOx), if the facility's potential to emit VOC or NOx is greater than 25 tons per year, or any Hazardous Air Pollutants (HAP), for which the facility's potential to emit is greater than 10 tons per year. The VOC and NOx emission data should reflect annual emission statement reports submitted pursuant to N.J.A.C. 7:27-21, and the HAP emissions data should reflect the annual Release and Pollution Prevention Report submitted pursuant to N.J.A.C. 7:1G-4 and 5 and N.J.A.C. 7:1K-6. Although not required, the Department encourages the facility to explain the reason for any significant trend, including whether it is the result of cross media shifts (to air, water, or solid waste) and/or pollution prevention. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 2. The facility will summarize annual potential to emit limits (<u>allowable</u> emissions) for VOC, NOx, and HAPs, which are subject to reporting under 1 above, for the last five years. Changes should be itemized for each emission unit (or process) with a potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 3. The facility will summarize five-year trends in annual VOC, NOx, and HAP emissions, which are subject to reporting under 1 above, on a pound per unit of product basis, based on annual actual emissions and annual production over the five year period. Changes should be itemized for each emission unit (or process) with a

- potential to emit over five tons per year of VOC or NOx or a potential to emit over one ton per year of any HAP. Also, show the net change for the facility.
- 4. The facility will discuss five-year trends in actual air contaminant emissions of non-source VOC and HAP fugitives, which are subject to reporting under 1 above; explain measures taken to minimize such fugitives; and provide an explanation for any significant changes.

Information to include with an application for a Significant Modification to this permit:

 For any significant modifications, the facility is encouraged to explain any cross media shifts of VOC and HAP air contaminants as part of the significant modification application. If an explanation is provided, the facility should identify the pollutant and the specific environmental media to which the pollutant is anticipated to be transferred, whether it be from air to solid waste or water, or from water or solid waste to the air.

Section E

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

DEFINITIONS

The terms used in this permit are used consistent with the definitions at N.J.A.C. 7:27-1 and N.J.A.C. 7:27-22. Any terms defined in this section are not defined at N.J.A.C. 7:27-1 or N.J.A.C. 7:27-22, and are needed for clarifying the permit.

"Permitting Authority" means the New Jersey Department of Environmental Protection (NJDEP).

"The EPA," or the "Administrator," means the Administrator of the EPA or his designee.

"M" preceding a unit of measure means one thousand. For example, "10 M gal." means ten thousand gallons.

"MM" preceding a unit of measure means one million. For example, "10 MM gal." means ten million gallons.

"Grandfathered" means, in reference to equipment or control apparatus, that construction, reconstruction, or modification occurred prior to enactment of N.J.S.A. 26:2C-9.2 on June 15, 1967, or prior to the subsequent applicable revisions to rules and regulations codified at N.J.A.C. 7:27-8 that occurred March 5, 1973, June 1, 1976, April 5, 1985, and October 31, 1994, and no construction, reconstruction, or modification of the equipment or control apparatus has occurred since.

"Compliance Plan" means the applicable requirements, monitoring requirements, recordkeeping requirements, and submittal/action requirements detailed in Section J, Facility Specific Requirements, of the operating permit.

Section F

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

GENERAL PROVISIONS AND AUTHORITIES

Operating Permits

- 1. No permittee shall allow any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in a quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, or which would unreasonably interfere with the enjoyment of life or property. This shall not include an air contaminant that occurs only in areas over which the permittee has exclusive use or occupancy. Conditions relative only to nuisance situations, including odors, are not considered Federally enforceable. [N.J.A.C. 7:27-22.16(g)8]
- 2. Any deviation from operating permit requirements which results in a release of air contaminants shall be reported to the Department as follows:

If the air contaminants are released in a quantity or concentration which poses a potential threat to public health, welfare or the environment or which might reasonably result in citizen complaints, the permittee shall report the release to the Department:

- i. Immediately on the Department hotline at 1-877-927-6337, pursuant to N.J.S.A. 26:2C-19(e); and
- ii. As part of the compliance certification required in N.J.A.C. 7:27-22.19(f). However, if the deviation is identified through source emissions testing, it shall be reported through the source emissions testing and monitoring procedures at N.J.A.C. 7:27-22.18(e)3; or

If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, the permittee shall report the release to the Department as part of the compliance certification required in N.J.A.C. 7:27-22.19(f), except for deviations identified by source emissions testing reports, which shall be reported through the procedures at N.J.A.C. 7:27-22.18(e)3; or

If the air contaminants are released in a quantity or concentration which poses no potential threat to public health, welfare or the environment and which will not likely result in citizen complaints, and the permittee intends to assert the affirmative defense afforded by N.J.A.C. 7:27-22.16(l), the violation shall be reported by 5:00 P.M. of the second full calendar day following the occurrence, or of becoming aware of the occurrence, consistent with N.J.A.C. 7:27-22.16(l). [N.J.A.C. 7:27-22.19(g)]

- 3. The permittee shall comply with all conditions of the operating permit including the approved compliance plan. Any non-compliance with a permit condition constitutes a violation of the New Jersey Air Pollution Control Act N.J.S.A. 26:2C-1 et seq., or the CAA, 42 U.S.C. §7401 et seq., or both, and is grounds for enforcement action; for termination, revocation and reissuance, or for modification of the operating permit; or for denial of an application for a renewal of the operating permit. [N.J.A.C. 7:27-22.16(g)1]
- 4. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of its operating permit. [N.J.A.C. 7:27-22.16(g)2]

- 5. This operating permit may be modified, terminated, or revoked for cause by the EPA pursuant to 40 CFR 70.7(g) and revoked or reopened and modified for cause by the Department pursuant to N.J.A.C. 7:27-22.25. [N.J.A.C. 7:27-22.16(g)3]
- 6. The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this operating permit; or to determine compliance with the operating permit. [N.J.A.C. 7:27-22.16(g)4]
- 7. The filing of an application for a modification of an operating permit, or of a notice of planned changes or anticipated non-compliance, does not stay any operating permit condition. [N.J.A.C. 7:27-22.16(g)5]
- 8. The operating permit does not convey any property rights of any sort, or any exclusive privilege. [N.J.A.C. 7:27-22.16(g)6]
- 9. Upon request, the permittee shall furnish to the Department copies of records required by the operating permit to be kept. [N.J.A.C. 7:27-22.16(g)7]
- The Department and its authorized representatives shall have the right to enter and inspect any facility subject to N.J.A.C. 7:27-22, or portion thereof, pursuant to N.J.A.C. 7:27-1.31. [N.J.A.C. 7:27-22.16(g)9]
- 11. The permittee shall pay fees to the Department pursuant to N.J.A.C. 7:27. [N.J.A.C. 7:27-22.16(g)10]
- 12. Each permittee shall maintain records of all source emissions testing or monitoring performed at the facility and required by the operating permit in accordance with N.J.A.C. 7:27-22.19. Records shall be maintained, for at least five years from the date of each sample, measurement, or report. Each permittee shall maintain all other records required by this operating permit for a period of five years from the date each record is made. At a minimum, source emission testing or monitoring records shall contain the information specified at N.J.A.C. 7:27-22.19(b). [N.J.A.C. 7:27-22.19(a) and N.J.A.C. 7:27-22.19(b)]
- In accordance with N.J.A.C. 7:27-22.19(c) and 22.19(d) 3, each permittee shall submit to the Department, 13. on forms provided by the Department, a six month deviation report relating to testing and monitoring required by the operating permit, not including information for testing and monitoring which have other reporting schedules specified in the permit. Normally, stack testing reporting is submitted within 45 days of test completion and continuous monitoring reporting is done quarterly. The six month report must address other specified monitoring, including, but not limited to, continuous and periodic monitoring data required by this permit. (See column two and three entitled "Monitoring Requirement" and "Recordkeeping Requirement," respectively, in the Facility Specific Requirement Section of this permit.). The six month reports for the testing and monitoring performed from January 1 through June 30, shall be reported by July 30 of the same calendar year; or from July 1 through December 31, shall be reported by January 30 of the following calendar year. Pursuant to N.J.A.C. 7:27-22.19(e), these six month reports shall clearly identify all deviations from operating permit requirements, the probable cause of such deviations, and any corrective actions taken. Any "None" listed in the Submittal/Action Requirement in the operating permit is not intended to override the six-month deviation report. The report shall be certified pursuant to N.J.A.C. 7:27-1.39 by a responsible official. Forms provided by the Department can be found on the Department's web site at: http://www.nj.gov/dep/enforcement/compliancecertsair.htm. [N.J.A.C. 7:27-22.19(d) 3 and N.J.A.C. 7:27-22.19(e)]

An annual compliance certification required by paragraph 2 above and required by N.J.A.C. 7:27-19(f) may also be considered as your six month deviation report for the period from July 1 through December 31 which is due by January 30 of each year if the annual compliance certification is submitted by January 30.

14. For emergencies (as defined at 40 CFR 70.6(g)(1)) that result in non-compliance with any promulgated federal technology-based standard such as NSPS, NESHAPS, or MACT, a federal affirmative defense is available, pursuant to 40 CFR 70. To assert a federal affirmative defense, the permittee must use the procedures set forth in 40 CFR 70. The affirmative defense provisions described in 15 below may not be

applied to any situation that caused the Facility to exceed any federally delegated regulation, including but not limited to NSPS, NESHAP, or MACT.

- 15. For situations other than those covered by 14 above, an affirmative defense is available for a violation of a provision or condition of the operating permit only if:
 - i. The violation occurred as a result of an equipment malfunction, an equipment start-up or shutdown, or during the performance of necessary equipment maintenance; and
 - ii. The affirmative defense is asserted and established as required by N.J.S.A. 26:2C-19.1 through 19.5 and any implementing rules. [N.J.A.C. 7:27-22.16(1)]
- 16. Each permittee shall meet all requirements of the approved source emissions testing and monitoring protocol during the term of the operating permit. [N.J.A.C. 7:27-22.18(j)]

The following paragraphs of this section are included for the permittee's convenience to remind them of their obligations with certain key applicable requirements. These paragraphs are not enforceable since they paraphrase areas of the operating permits rule. Also, these paragraphs do not reference all the applicable requirements with which the permittee must comply.

- 17. Each owner and each operator of any facility, source operation, or activity to which this permit applies is responsible for ensuring compliance with all requirements of N.J.A.C. 7:27-22. If the owner and operator are separate persons, or if there is more than one owner or operator, each owner and each operator is jointly and severally liable for any fees due under N.J.A.C. 7:27-22, and for any penalties for violation of N.J.A.C. 7:27-22.
- 18. In the event of a challenge to any part of this operating permit, all other parts of the permit shall continue to be valid.
- 19. The permittee shall ensure that no air contaminant is emitted from any significant source operation at a rate, calculated as the potential to emit, that exceeds the applicable threshold for reporting emissions set forth in the Appendix to N.J.A.C. 7:27-22, unless emission of the air contaminant is authorized by this operating permit.
- 20. Consistent with the provisions of N.J.A.C. 7:27-22.3(e), the permittee shall ensure that all requirements of this operating permit are met. In the event that there are multiple emission limitations, monitoring, recordkeeping, and/or reporting requirements for a given source operation, the facility must comply with all requirements, including the most stringent.
- 21. Consistent with the provisions of N.J.A.C. 7:27-22.9(c), the permittee shall use monitoring of operating parameters, where required by the compliance plan, as a surrogate for direct emissions testing or monitoring, to demonstrate compliance with applicable requirements.
- 22. The permittee shall file a timely and complete application for:

Administrative Amendments; Seven-Day-Notice changes; Minor Modifications; Significant Modifications; and Renewals.

Section G

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

COMPLIANCE SCHEDULES

The facility has represented compliance with all the applicable requirements. Therefore, there are no compliance schedules included with this permit approval.

Section H

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

STATE-ONLY APPLICABLE REQUIREMENTS

N.J.A.C. 7:27-22.16(b)5 requires the Department to specifically designate as not being federally enforceable any permit conditions based only on applicable state requirements. The applicable state requirements to which this provision applies are listed in the table titled "State-Only Applicable Requirements."

STATE-ONLY APPLICABLE REQUIREMENTS

The following applicable requirements are not federally enforceable:

SECTION	SUBJECT ITEM	ITEM#	<u>REF. #</u>
F		15	
· J	FC		3
J	FC		10

Section I

Facility Name: MANCHESTER RENEWABLE POWER CORP LES Program Interest Number: 78901 Permit Activity Number: BOP060001

FACILITY SPECIFIC REQUIREMENTS TABLE OF CONTENTS

<u>Subje</u>	ect Item and Name			Page Number
•	FC		,	1 - 4
	Group (GR):			
	GR1			5 - 6
	*			* *
	Emission Unit (U):			1. 4
	U1, OS1			7 - 11
	U2, OS1	,		12
	U3, OS1	•		13
	U4, OS1			14
	U5, OS1			15
	U6, OS1			16
	U7 Six Ocean Er	ergy Corp. CAT 3520 Lean Burn Rec	iprocating Engines	
	OS Sum			17
	OS1			39

Section J

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

FACILITY SPECIFIC REQUIREMENTS

Section K

Facility Name: MANCHESTER RENEWABLE POWER CORP LES
Program Interest Number: 78901
Permit Activity Number: BOP060001

INVENTORIES

Insignificant Source Emissions
Non-Source Fugitive Emissions
Equipment Inventory
Emission Point Inventory
Emission Unit/Batch Process Inventory
Subject Item Group Inventory

New Jersey Department of Environmental Protection **Reason for Application**

Permit Being Modified

Permit Class: BOP

Number: 30001

Description

Application for a federal PSD permit and a Significant modification under State rules, to of Modifications: include six new RICE engines each 16.38 MMBTU/hr (HHV) and to increase the stack heights of the emission points of six existing engines from 23 feet to 37.5 feet. The six new engines will increase the power generation capacity of the facility by a maximum of 9.6 MW.